

| L Number | Hits | Search Text | DB | Time stamp |
|----------|------|-------------------|---------------------------------|------------------|
| 1 | 322 | ("544/221").CCLS. | USPAT; US-PGPUB; EPO; JPO | 2002/01/09 17:07 |

(FILE 'HCAPLUS' ENTERED AT 09:45:16 ON 15 JUN 1999)
DEL HIS Y

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L1          1 S 2451-62-9
L2          742 S 46.492.1/RID AND 3 1.30.1/RID
L3          663 S L2 AND C12H15N3O6
L4          1 S 106-89-8
L5          516 S 108-80-5 OR 108-80-5/CRN
L6          17717 S 106-89-8/CRN
L7          17718 S L4 OR L6
L8          230 S 46.492.1/RID AND 3/CL
L9          34 S L8 AND 12/C
L10         23 S L9 AND 3/O
L11         8 S C12H18CL3N3O6
L12         5 S L11 AND L8
L13         3 S L3 AND BETA
L14         27 S L3 AND ALPHA

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L15      1150 S L3
L16      50 S L15 AND (BETA )
L17      51 S L15 AND (ALPHA )      C(
L18      23 S L16 AND L17
L19      2 S L3 AND L5 AND L7 AND L12

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L20      7 S L3
L21      0 S L20 AND ALPHA AND BETA
L22      0 S L3 AND L5 AND L12

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L23      2 S L3/PRO
L24      2 S L23 AND L5/RRT
L25      0 S L24 AND L12/RRT

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L26      214 S L3
L27      64 S L26 AND ALPHA AND BETA
L28      27 S L27 AND CRYSTAL?
L29      0 S L26 AND ALPHA(8A)CRYSTAL? AND BETA(8A)CRYSTAL?
L30      0 S L26 AND ALPHA(20A)CRYSTAL? AND BETA(20A)CRYSTAL?
L31      20 S L26 AND ALPHA(9A)BETA AND CRYSTAL?
L32      0 S L3/P AND L12
L33      0 S L13

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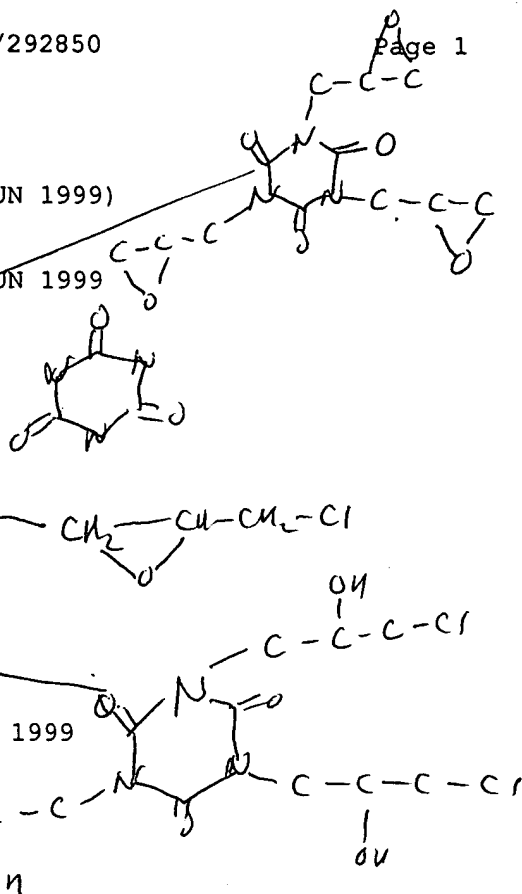
L34          14 S L13
L35          13 S L13 AND L14
L36           6 S L35 NOT L18

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L37          0 S  L13 AND  L14

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=> D

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS

RN 2451-62-9 REGISTRY

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN s-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(2,3-epoxypropyl)- (8CI)

CN s-Triazine-2,4,6(1H,3H,5H)-trione, tris(2,3-epoxypropyl)- (7CI)

OTHER NAMES:

CN 1,3,5-Triglycidyl isocyanurate

CN 1,3,5-Triglycidylisocyanuric acid

CN 1,3,5-Tris(2,3-epoxypropyl) isocyanurate

CN 1,3,5-Tris(oxiranylmethyl)-1,3,5-triazine-2,4,6-trione

CN Glycidyl isocyanurate

CN N,N',N''-Triglycidyl isocyanurate

CN NSC 269934

CN NSC 296934

CN TGT

CN Triglycidyl isocyanurate

CN Tris(2,3-epoxypropyl) isocyanurate

CN Tris(epoxypropyl) isocyanurate

FS 3D CONCORD

MF C12 H15 N3 O6

CI COM

LC STN Files: ADISINSIGHT, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA,
CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CBNB, CIN,
CSCHEM, CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA,

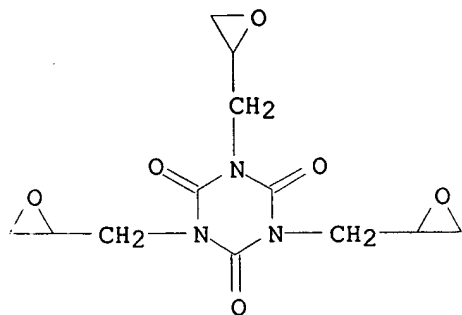
MEDLINE,

MSDS-OHS, NIOSHTIC, PIRA, PHAR, PROMT, RTECS*, SPECINFO, TOXLINE,
TOXLIT, ULIDAT, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



623 REFERENCES IN FILE CA (1967 TO DATE)

106 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

625 REFERENCES IN FILE CAPLUS (1967 TO DATE)

7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

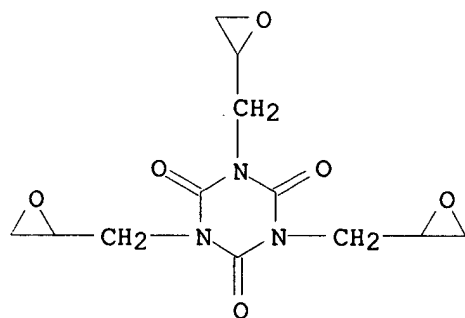
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L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS

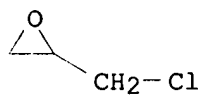
Ring System Data

| Elemental Analysis EA | Elemental Sequence ES | Size of the Rings SZ | Ring System Formula RF | Ring Identifier RID | RID Occurrence Count |
|-----------------------------|-----------------------------|----------------------------|------------------------------|---------------------------|----------------------------|
| C2O | OC2 | 3 | C2O | 1.30.1 | 3 |
| C3N3 | NCNCNC | 6 | C3N3 | 46.492.1 | 1 |

CRN 2451-62-9
CMF C12 H15 N3 O6



CM 6

CRN 106-89-8
CMF C3 H5 Cl O

=> D HIS

(FILE 'HCAPLUS' ENTERED AT 09:45:16 ON 15 JUN 1999)
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 09:52:42 ON 15 JUN 1999

L1 1 S 2451-62-9
L2 742 S 46.492.1/RID AND 3 1.30.1/RID
L3 663 S L2 AND C12H15N3O6
L4 1 S 106-89-8
L5 516 S 108-80-5 OR 108-80-5/CRN
L6 17717 S 106-89-8/CRN
L7 17718 S L4 OR L6
L8 230 S 46.492.1/RID AND 3/CL
L9 34 S L8 AND 12/C
L10 23 S L9 AND 3/O
L11 8 S C12H18CL3N3O6
L12 5 S L11 AND L8
L13 3 S L3 AND BETA
L14 27 S L3 AND ALPHA

FILE 'CAPLUS' ENTERED AT 10:01:25 ON 15 JUN 1999

L15 1150 S L3
L16 50 S L15 AND (BETA)
L17 51 S L15 AND (ALPHA)
L18 23 S L16 AND L17
L19 2 S L3 AND L5 AND L7 AND L12

FILE 'CAOLD' ENTERED AT 10:07:42 ON 15 JUN 1999

L20 7 S L3
L21 0 S L20 AND ALPHA AND BETA
L22 0 S L3 AND L5 AND L12

FILE 'CASREACT' ENTERED AT 10:09:02 ON 15 JUN 1999

L23 2 S L3/PRO
L24 2 S L23 AND L5/RRT
L25 0 S L24 AND L12/RRT

FILE 'USPATFULL' ENTERED AT 10:09:27 ON 15 JUN 1999

L26 214 S L3
L27 64 S L26 AND ALPHA AND BETA
L28 27 S L27 AND CRYSTAL?
L29 0 S L26 AND ALPHA(8A)CRYSTAL? AND BETA(8A)CRYSTAL?
L30 0 S L26 AND ALPHA(20A)CRYSTAL? AND BETA(20A)CRYSTAL?
L31 20 S L26 AND ALPHA(9A)BETA AND CRYSTAL?
L32 0 S L3/P AND L12
L33 0 S L13

FILE 'CAPLUS' ENTERED AT 10:21:40 ON 15 JUN 1999

L34 14 S L13
L35 13 S L13 AND L14
L36 6 S L35 NOT L18

FILE 'CAOLD' ENTERED AT 10:23:02 ON 15 JUN 1999

L37 0 S L13 AND L14

=> D BIB ABS HITSTR

L36 ANSWER 1 OF 6 CAPLUS COPYRIGHT 1999 ACS

AN 1995:183959 CAPLUS

DN 122:134952

TI One-component epoxy resin compositions

IN Ikeda, Hisao; Gunji, Yasuhiro

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | JP 06192396 | A2 | 19940712 | JP 92-346351 | 19921225 |
| AB | Compsns. with good heat resistance, dielec. properties, and storage stability at room temp., useful for adhesives, laminates, etc., of electronic parts, comprise (A) 100 parts low-m.p. isomers found in tris(2,3-epoxypropyl) isocyanurate (I) with m.p. 98-107.degree. and epoxy equiv. wt. .ltoreq.105, (B) 10-150 parts bisphenol epoxy resins liq. at room temp., (C) 0.7-1.1 equiv (vs. total epoxy groups) liq. polycarboxylic acid anhydrides, and (D) 0.1-5% (on total epoxy) acetylacetone complex of Co or Al. Thus, I fraction (m.p. 98-107.degree., epoxy equiv. wt. 100) 50, Epikote 828 50, methylhimic anhydride 122, and Co tris(acetylacetone) 0.4 part were mixed to obtain a compn. showing storage stability >90 days at 23.degree., which was heated to give cured products showing glass-transition temp. 231.degree. and vol. resistivity at 23.degree. 80 .times. 10 ¹⁵ .OMEGA.-cm. | | | | |
| IT | 146189-70-0P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (epoxy resin one-component compns. with good heat resistance and storage stability and elec. properties) | | | | |
| RN | 146189-70-0 CAPLUS | | | | |
| CN | 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and (3a.alpha.,4.beta.,7.beta.,7a.alpha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME) | | | | |

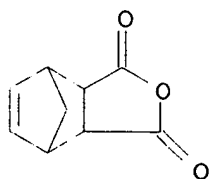
CM 1

CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

CDES *

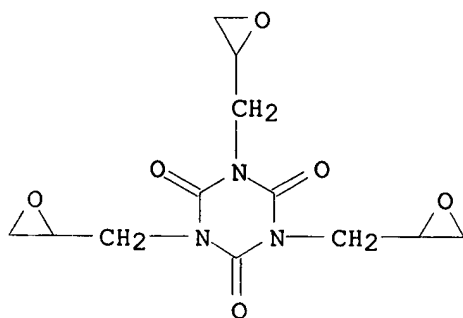


D1-Me

CM 2

CRN 2451-62-9

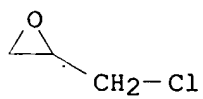
CMF C12 H15 N3 O6



CM 3

CRN 106-89-8

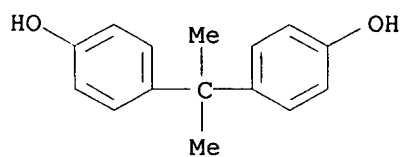
CMF C3 H5 Cl O



CM 4

CRN 80-05-7

CMF C15 H16 O2



=> D BIB ABS HITSTR 2

L36 ANSWER 2 OF 6 CAPLUS COPYRIGHT 1999 ACS

AN 1995:83418 CAPLUS

DN 122:11534

TI Heat-resistant epoxy resin compositions and method of curing

IN Ikeda, Hisao; Gunji, Yasuhiro; Shirakawa, Masayoshi

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 06179737 | A2 | 19940628 | JP 92-331826 | 19921211 |

AB Title comps., moisture-resistant with good dielec. properties at high temp. and useful for potting and die-bonding of semiconductors (no data), comprise 100 parts tris(2,3-epoxypropyl) isocyanurate (I) 100, 10-150 parts bisphenol-based epoxy resins, 0.7-1.1 equiv. (based on total epoxy groups) polycarboxylic acid anhydrides, and 0.1-5 parts curing accelerators, and the curing is effected until .gtoreq.95% conversion of the epoxy groups and .gtoreq.95% conversion of the anhydride groups by proper combination of accelerator, temp., and time. Thus, a mixt. of I 70, Epikote 828 30, methylhimic anhydride 138, and DMP 30 (accelerator) 3 parts was placed in a mold constructed of two silicone-coated glass plates

and a 3 mm-thick silicone rubber spacer and heated at 100.degree. for 2 h and at 180.degree. for 3 h to give a specimen with Izod impact strength 3.8 kg.cm/cm, flexural strength 11 kg/mm2, flexural modulus 412 kg/mm2, glass transition temp. 212.degree., and moisture absorption 0.4%.

IT 146189-70-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (manuf. of, heat- and moisture-resistant with good dielec. properties)

RN 146189-70-0 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and (3a.alpha.,4.beta.,7.beta.,7a.alpha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME)

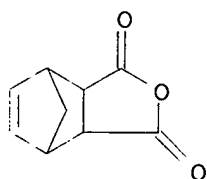
CM 1

CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

CDES *

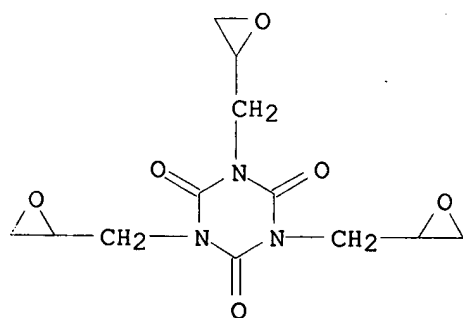


D1-Me

CM 2

CRN 2451-62-9

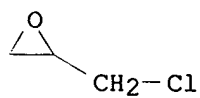
CMF C12 H15 N3 O6



CM 3

CRN 106-89-8

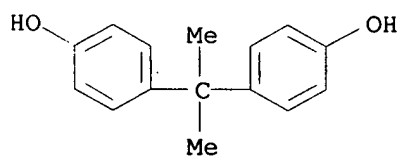
CMF C3 H5 Cl O



CM 4

CRN 80-05-7

CMF C15 H16 O2



=> D BIB ABS HITSTR 3

L36 ANSWER 3 OF 6 CAPLUS COPYRIGHT 1999 ACS

AN 1993:125855 CAPLUS

DN 118:125855

TI Storage-stable triglycidyl isocyanurate compositions

IN Ikeda, Hisao; Gunji, Yasuhiro; Shirakawa, Masayoshi

PA Nissan Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | JP 04264123 | A2 | 19920918 | JP 91-24647 | 19910219 |
| AB | The title compns. which are liq. at room temp. comprise 100 parts stereoisomer of triglycidyl isocyanurate (I; m.p. 98-107.degree.; epoxy equiv .gtoreq.9.9) having lower m.p. than another stereoisomer, carboxylic anhydrides (curing agents) at carboxylic anhydride group: epoxy group (0.5-1.5):1, and optionally .ltoreq.150 parts bivalent phenol glycidyl ether which are liq. at room temp. Thus, 100 parts TEPIC-L (I) was mixed with 149 parts methyltetrahydrophthalic anhydride, melted at 100-110.degree. to give a liq. compn., which generated .apprx.1/20 (vol. ratio based on the total vol. of the soln.) crystals after 43 days at 23.degree.. | | | | |
| IT | 56619-46-6 146189-70-0 | | | | |
| | RL: USES (Uses) | | | | |
| | (cured, with high glass transition temp.) | | | | |
| RN | 56619-46-6 CAPLUS | | | | |
| CN | 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (3a.alpha.,4.beta.,7.beta.,7a.alpha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME) | | | | |

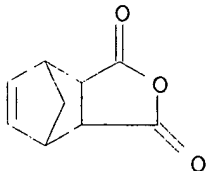
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CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

CDES *

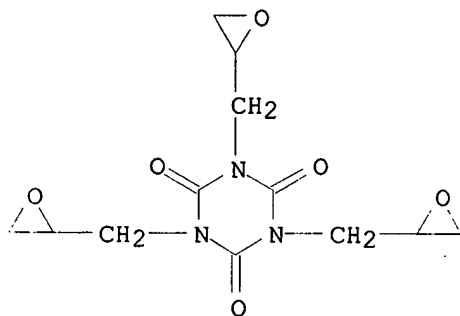


D1-Me

CM 2

CRN 2451-62-9

CMF C12 H15 N3 O6



RN 146189-70-0 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and (3a.alpha.,4.beta.,7.beta.,7a.alpha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME)

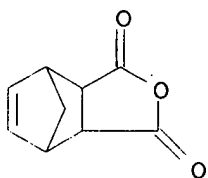
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CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

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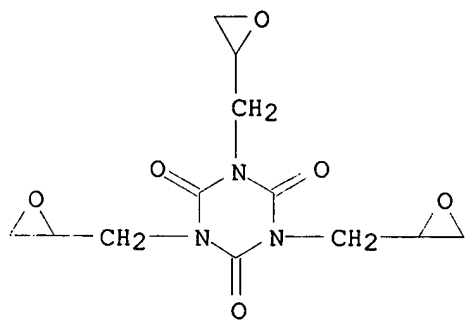


D1-Me

CM 2

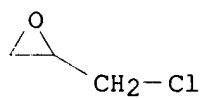
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CMF C12 H15 N3 O6



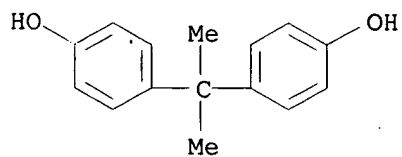
CM 3

CRN 106-89-8
CMF C3 H5 Cl O



CM 4

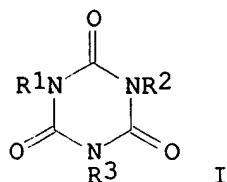
CRN 80-05-7
CMF C15 H16 O2



=> D BIB ABS HITSTR 4

L36 ANSWER 4 OF 6 CAPLUS COPYRIGHT 1999 ACS
AN 1990:200274 CAPLUS
DN 112:200274
TI Epoxy resin adhesives for binding hollow fibers
IN Yanaga, Yukio
PA Mitsubishi Kasei Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 01289884 | A2 | 19891121 | JP 88-118645 | 19880516 |
| GI | JP 06078510 | B4 | 19941005 | | |



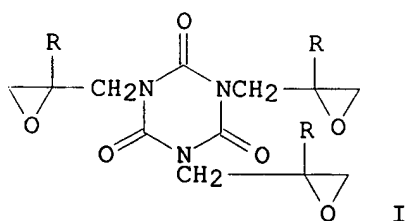
AB The title adhesives for binding hollow fibers for sepn. membranes comprise polyfunctional epoxides p-R1R2NC6H4CH2C6H4NR3R4-p (R1-R4 = H, glycidyl; .gtoreq.3 of R1-R4 = glycidyl), R1R2NCH2C6H4CH2NR3R4 (R1-R4 = H, glycidyl, excluding R1 = R2 = H and R3 = R4 = H), and/or I (R1-R3 = H, glycidyl; .gtoreq.2 of R1-R3 = glycidyl), curing agents, and optionally curing accelerators. Thus, the ends of polyimide hollow fiber modules were bonded by a mixt. of bisphenol A diglycidyl ether 18, tetraglycidylldiaminodiphenylmethane 12, diaminodiphenyl sulfone 21, and isophoronediamine 16 g, left at 20.degree. for 10 h, then cured at 100-180.degree. for 7 h. The membrane showed good sepn. of water-EtOH even after 1 mo.

IT 126858-12-6
RL: TEM (Technical or engineered material use); USES (Uses)
(adhesives, for binding hollow fibers, for sepn. membranes)

RN 126858-12-6 CAPLUS

=> D BIB ABS HITSTR 5

L36 ANSWER 5 OF 6 CAPLUS COPYRIGHT 1999 ACS
AN 1986:5402 CAPLUS
DN 104:5402
TI Decomposition and formation of triazine compounds. 10. Pyrolysis and properties of tris(2,3-epoxypropyl)- and tris(2,3-epoxy-2-methylpropyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione
AU Shimasaki, Choichiro; Takeuchi, Masanori; Tsutuguchi, Junichiro; Shimizu, Koichi; Yamakawa, Hisato
CS Fac. Eng., Univ. Toyama, Toyama, 933, Japan
SO Bull. Chem. Soc. Jpn. (1985), 58(8), 2197-202
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA German
GI



AB The pyrolysis and mass spectral fragmentation of the title compds., (R,R,R)/(S,S,S)- and (R,R,S)/(S,S,R)-I (R = H) and I (R = Me), were examd.

The pyrolysis proceeded via oxazolidinone formation with activation energies of 114, 170, and 146 kJ mol⁻¹, resp. Mass spectral fragmentation involved 5 main paths. NMR and high-resoln. mass spectral studies were also described.

IT 59653-73-5 59653-74-6

RL: PRP (Properties)

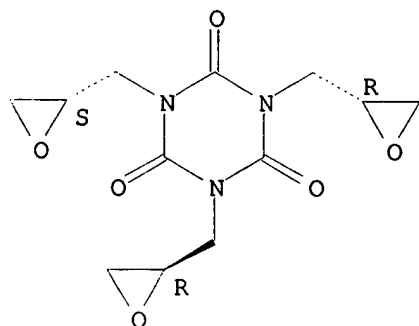
(mass spectrum and pyrolysis of)

RN 59653-73-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

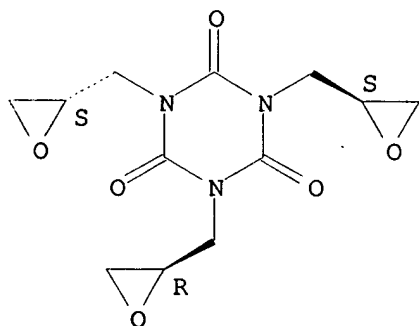
Currently available stereo shown.



RN 59653-74-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> D BIB ABS HITSTR 6

L36 ANSWER 6 OF 6 CAPLUS COPYRIGHT 1999 ACS

AN 1975:460760 CAPLUS

DN 83:60760

TI Epoxy resin compound

IN Mitsuoka, Hisao; Uchida, Mitsuo; Fushiki, Takeshi; Kaneko, Mamoru

PA Mitsubishi Chemical Industries Co., Ltd., Japan

SO Japan., 8 pp.

CODEN: JAXXAD

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 49045720 | B4 | 19741205 | JP 67-68772 | 19671027 |

AB Triglycidyl isocyanurate (I) or its deriv. is treated with an acid anhydride in the presence of an epoxy resin (liq. at room temp.) to give a liq. (at room temp.) epoxy resin compn. (isocyanurate or its deriv. content was 25-50% of epoxy resin). Thus, 342 parts epoxy resin was mixed with 537 parts methylhimic acid anhydride at 70.degree. under N, treated with 121 parts I at 150.degree. for 30 min to give a liq. resin compn. (viscosity at room temp. 25 P) which was allowed to stand for 40 days at room temp. without any change.

IT 56619-46-6

RL: USES (Uses)

(blends with epoxy resin, liq.)

RN 56619-46-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (3a.alpha.,4.beta.,7.beta.,7a.alpha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME)

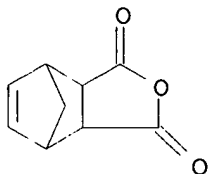
CM 1

CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

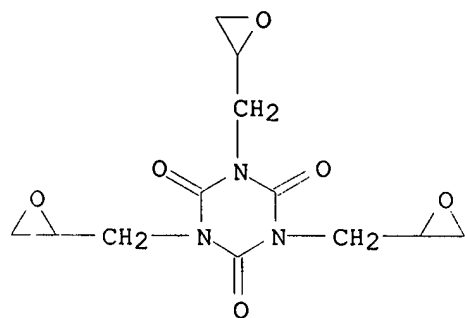
CDES *



D1-Me

CM 2

CRN 2451-62-9
CMF C12 H15 N3 O6



=> D HIS

(FILE 'HCAPLUS' ENTERED AT 09:45:16 ON 15 JUN 1999)
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 09:52:42 ON 15 JUN 1999

L1 1 S 2451-62-9
L2 742 S 46.492.1/RID AND 3 1.30.1/RID
L3 663 S L2 AND C12H15N3O6
L4 1 S 106-89-8
L5 516 S 108-80-5 OR 108-80-5/CRN
L6 17717 S 106-89-8/CRN
L7 17718 S L4 OR L6
L8 230 S 46.492.1/RID AND 3/CL
L9 34 S L8 AND 12/C
L10 23 S L9 AND 3/O
L11 8 S C12H18CL3N3O6
L12 5 S L11 AND L8
L13 3 S L3 AND BETA
L14 27 S L3 AND ALPHA

FILE 'CAPLUS' ENTERED AT 10:01:25 ON 15 JUN 1999

L15 1150 S L3
L16 50 S L15 AND (BETA)
L17 51 S L15 AND (ALPHA)
L18 23 S L16 AND L17
L19 2 S L3 AND L5 AND L7 AND L12

FILE 'CAOLD' ENTERED AT 10:07:42 ON 15 JUN 1999

L20 7 S L3
L21 0 S L20 AND ALPHA AND BETA
L22 0 S L3 AND L5 AND L12

FILE 'CASREACT' ENTERED AT 10:09:02 ON 15 JUN 1999

L23 2 S L3/PRO
L24 2 S L23 AND L5/RRRT
L25 0 S L24 AND L12/RRRT

FILE 'USPATFULL' ENTERED AT 10:09:27 ON 15 JUN 1999

L26 214 S L3
L27 64 S L26 AND ALPHA AND BETA
L28 27 S L27 AND CRYSTAL?
L29 0 S L26 AND ALPHA(8A)CRYSTAL? AND BETA(8A)CRYSTAL?
L30 0 S L26 AND ALPHA(20A)CRYSTAL? AND BETA(20A)CRYSTAL?
L31 20 S L26 AND ALPHA(9A)BETA AND CRYSTAL?
L32 0 S L3/P AND L12
L33 0 S L13

FILE 'CAPLUS' ENTERED AT 10:21:40 ON 15 JUN 1999

L34 14 S L13
L35 13 S L13 AND L14
L36 6 S L35 NOT L18

FILE 'CAOLD' ENTERED AT 10:23:02 ON 15 JUN 1999

L37 0 S L13 AND L14

=> D BIB ABS HITRN

L31 ANSWER 1 OF 20 USPATFULL

AN 97:115417 USPATFULL

TI Piperidine-triazine compounds suitable for use as stabilisers for organic materials

IN Borzatta, Valerio, Bologna, Italy

Vignali, Graziano, Bologna, Italy

Guizzardi, Fabrizio, Bologna, Italy

PA Ciba Specialty Chemicals Corporation, Tarrytown, NY, United States (U.S.

corporation)

PI US 5696261 19971209

AI US 95-555353 19951108 (8)

RLI Division of Ser. No. US 94-219049, filed on 28 Mar 1994, now patented, Pat. No. US 5489683

PRAI IT 93-MI661 19930405

DT Utility

EXNAM Primary Examiner: Gupta, Yogendra N.

LREP Kovalski, Michele A.; Malia, Victoria M.

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1800

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel piperidine-triazine compounds of the formula (Ia) and (Ib) suitable for use as light stabilisers, heat stabilisers and oxidation stabilisers for organic materials. The meanings of R.sub.1, R.sub.2, R.sub.3, G.sub.1, G.sub.2, L.sub.1, L.sub.2, m and n are defined in the text. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(prepn. of piperidine- and triazine-contg. oligomeric compds. antioxidants)

=> D BIB ABS HITRN 2

L31 ANSWER 2 OF 20 USPATFULL

AN 96:70488 USPATFULL

TI Stabilized flexible PVC

IN Drewes, Rolf, Lindenfels, Germany, Federal Republic of
Kolb, Markus, Plankstadt, Germany, Federal Republic of
Kuhn, Karl J., Lautertal, Germany, Federal Republic of
Sander, Hans-J urgen, Lorsch, Germany, Federal Republic of
Wehner, Wolfgang, Ober-Ramstadt, Germany, Federal Republic of

PA Ciba-Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)

PI US 5543449 19960806

AI US 95-419310 19950410 (8)

PRAI CH 94-1140 19940415

DT Utility

EXNAM Primary Examiner: Szekeley, Peter A.

LREP Kovaleski, Michele A.

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1219

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A high degree of stabilization of flexible PVC is achieved by using a perchlorate and a terminal epoxide compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 28825-96-9, Araldite PT 810

(heat stabilizers for flexible PVC)

=> D BIB ABS HITRN 3

L31 ANSWER 3 OF 20 USPATFULL

AN 96:60751 USPATFULL

TI Stabilized halogen-containing polymers

IN Wehner, Wolfgang, Ober-Ramstadt, Germany, Federal Republic of
Drewes, Rolf, Lindenfels, Germany, Federal Republic of
Kuhn, Karl J., Lautertal, Germany, Federal Republic of
Sander, Hans-Jurgen, Lorsch, Germany, Federal Republic of
Kolb, Markus, Plankstadt, Germany, Federal Republic of
PA Ciba-Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)

PI US 5534566 19960709

AI US 95-419311 19950410 (8)

PRAI CH 94-1143 19940415

DT Utility

EXNAM Primary Examiner: Hoke, Veronica P.

LREP Kovalski, Michele A.

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1579

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Use of a di- or polysaccharide alcohol and an inorganic or organic
zinc,

aluminum or rare-earth compound allows a high degree of stabilization
of
a halogen-containing polymer or polymer recyclate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 28825-96-9, Araldite PT 810
(heat stabilizers for PVC)

=> D BIB ABS HITRN 4

L31 ANSWER 4 OF 20 USPATFULL

AN 96:43727 USPATFULL

TI Stabilized polyvinyl chloride

IN Drewes, Rolf, Lindenfels, Germany, Federal Republic of

Kolb, Markus, Plankstadt, Germany, Federal Republic of

Kuhn, Karl J., Lautertal, Germany, Federal Republic of

Sander, Hans-Jurgen, Lorsch, Germany, Federal Republic of

Wehner, Wolfgang, Ober-Ramstadt, Germany, Federal Republic of

PA Ciba-Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)

PI US 5519077 19960521

AI US 95-419313 19950410 (8)

PRAI CH 94-1141 19940415

DT Utility

EXNAM Primary Examiner: Hoke, Veronica P.

LREP Kovalski, Michele A.

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1374

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A high degree of stabilization of polyvinyl chloride is achieved by using a perchlorate, a terminal epoxide compound and an antioxidant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 28825-96-9, Araldite PT 810
(heat stabilizers for PVC)

=> D BIB ABS HITRN 5

L31 ANSWER 5 OF 20 USPATFULL

AN 96:11226 USPATFULL

TI Piperidine-triazine compounds suitable for use as stabilisers for organic materials

IN Borzatta, Valerio, Bologna, Italy

Vignali, Graziano, Bologna, Italy

Guizzardi, Fabrizio, Bologna, Italy

PA Ciba-Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)

PI US 5489683 19960206

AI US 94-219049 19940328 (8)

PRAI IT 93-MI661 19930405

DT Utility

EXNAM Primary Examiner: Gupta, Yogendra N.

LREP Hall, Luther A.; Kovaleski, Michele A.

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1823

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel piperidine-triazine compounds of the formula (Ia) and (Ib) suitable for use as light stabilizers, heat stabilizers and oxidation stabilizers for organic materials. The meanings of R.sub.1, R.sub.2, R.sub.3, G.sub.1, G.sub.2, L.sub.1, L.sub.2, m and n are defined in the text. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(prepn. of piperidine- and triazine-contg. oligomeric compds. antioxidants)

=> D BIB ABS HITRN 6

L31 ANSWER 6 OF 20 USPATFULL

AN 92:82833 USPATFULL

TI Thermosetting powder coating compositions containing bisphenoxy-propanol as a melt viscosity modifier

IN Skora, Stanislaw B., Mountain Lakes, NJ, United States

PA Estron Chemical, Inc., Parsippany, NJ, United States (U.S. corporation)

PI US 5153252 19921006

AI US 91-800091 19911129 (7)

DT Utility

EXNAM Primary Examiner: Michl, Paul R.; Assistant Examiner: Yoon, Tae H.

LREP Mathews, Woodbridge & Collins

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 380

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a thermosetting powder coating composition comprising a thermosetting polymer, a crosslinking agent, and a bisphenoxy-propanol as a melt viscosity modifier. Preferably, the composition additionally comprises a flow control agent different from the bisphenoxy-propanol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9D, polymers with alkyd resins

(coatings, powd., contg. bisphenoxypropanol as the melt viscosity modifier, for pinhole-free films)

=> D BIB ABS HITRN 7

L31 ANSWER 7 OF 20 USPATFULL

AN 92:49085 USPATFULL

TI Glass filled copolyether-polyester compositions

IN Gallucci, Robert R., Mt. Vernon, IN, United States

Okamoto, Kelvin T., Wilmington, DE, United States

PA General Electric Company, Pittsfield, MA, United States (U.S. corporation)

PI US 5122551 19920616

AI US 90-566008 19900810 (7)

RLI Continuation-in-part of Ser. No. US 90-523165, filed on 14 May 1990, now

abandoned

DT Utility

EXNAM Primary Examiner: Michl, Paul R.; Assistant Examiner: Rajguru, Umakant

LREP Conard, Spencer D.

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 609

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A glass filled copolyether-polyester resin composition is provided exhibiting improved tensile and flexural strength as well as high impact

strength. The improved properties are obtained by employing a glass fiber reinforcing agent comprising an epoxy functional cyanurate or isocyanurate. The compositions are useful for making molded fiber reinforced thermoplastic articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9, Triglycidyl isocyanurate

(sizes, on glass fibers for reinforcing polyester-polyoxyalkylenes)

=> D BIB ABS HITRN 8

L31 ANSWER 8 OF 20 USPATFULL

AN 92:21105 USPATFULL

TI Weatherable powder coating compositions

IN Kapilow, Lorraine, Rye, NY, United States

Puglisi, Joseph S., Crompond, NY, United States

Cheng, Chi-Wen F., New City, NY, United States

PA U C B S.A., Brussels, Belgium (non-U.S. corporation)

PI US 5097006 19920317

AI US 90-616552 19901121 (7)

DT Utility

EXNAM Primary Examiner: Kight, III, John; Assistant Examiner: Acquah, S. A.

LREP Wenderoth, Lind & Ponack

CLMN Number of Claims: 18

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 649

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carboxyl-terminated and hydroxyl-terminated aliphatic polyester compositions derived from 1,4-cyclohexane-dicarboxylic acid, and a glycol component comprising primarily of cycloaliphatic diols and modifying aliphatic glycols, said polyesters being optionally

stabilized

by the presence of ultraviolet light absorbing compounds and/or hindered

amine light stabilizers and being used in powder coating formulations to

provide improved weatherability thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 153368-63-9 153368-64-0 153368-65-1

(powd. coatings, weather-resistant)

IT 152895-93-7

(powder coatings, weather-resistant)

=> D BIB ABS HITRN 9

L31 ANSWER 9 OF 20 USPATFULL

AN 92:10890 USPATFULL

TI Formulations and process for dressing leather and coating textiles

IN Tork, Leo, Leverkusen, Germany, Federal Republic of
Rottmaier, Ludwig, Odenthal Gloebusch, Germany, Federal Republic of
Hohne, Wolfgang, Bergisch Gladbach, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
(non-U.S. corporation)

PI US 5087646 19920211

AI US 89-397142 19890822 (7)

RLI Continuation of Ser. No. US 88-175718, filed on 31 Mar 1988, now
abandoned

PRAI DE 87-3711415 19870404

DT Utility

EXNAM Primary Examiner: Marquis, Melvyn I.

LREP Sprung Horn Kramer & Woods

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 613

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Aqueous formulations containing a copolymer of monoolefinically
unsaturated monomers having an acid number of 5 to 150 mg of KOH/g of
substance and/or a polyurethane having an acid number of 5 to 150 mg of
KOH/g of substance as the binder and a triglycidyl isocyanurate having
an epoxy value of 0.5 to 1.01 as the cross-linker are suitable for
dressing fill grain, buffed or split leathers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 119663-64-8 119663-65-9 119663-66-0
(finishes, for leather and textiles)

=> D BIB ABS HITRN 10

L31 ANSWER 10 OF 20 USPATFULL

AN 89:58843 USPATFULL

TI Photosensitive compositions of matter which are capable of undergoing condensation or additional reactions and may or may not be crosslinkable, reaction products which can be prepared therefrom and their use

IN Finter, Jurgen, Freiburg, Germany, Federal Republic of
Fischer, Walter, Reinach, Switzerland
Lohse, Friedrich, Oberwil, Switzerland

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 4849533 19890718

AI US 88-188682 19880420 (7)

RLI Continuation of Ser. No. US 86-940313, filed on 10 Dec 1986, now abandoned which is a division of Ser. No. US 85-795029, filed on 4 Nov 1985, now patented, Pat. No. US 4657842 which is a continuation of Ser. No. US 83-551767, filed on 14 Nov 1983, now abandoned

PRAI CH 82-6870 19821125

DT Utility

EXNAM Primary Examiner: Hollrah, Glennon H.; Assistant Examiner: Russell, Mark

W.

LREP Falber, Harry; O'Brien, Stephen V.

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 636

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Photosensitive compositions of matter which are capable of undergoing condensation or addition reactions and may or may not be crosslinkable, and which contain an anthraquinone of the formula I ##STR1## in which

X,

X', R' and R" are as defined in Patent Claim 1 and X or X' is, for example, --OH or --NH.sub.2, at least one monomeric, oligomeric or polymeric compound which can be reacted with this anthraquinone, for example, if X is --OH, a polymer with terminal glycidyl groups, and, where relevant, a crosslinking agent and/or a salt of a metal of group Ib or VIII of the periodic table, are suitable for image formation by means of electroless metal deposition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(photoimaging compn. contg., for metal images by electroless deposition

)

=> D BIB ABS HITRN 11

L31 ANSWER 11 OF 20 USPATFULL

AN 87:26350 USPATFULL

TI Photosensitive compositions of matter comprising epoxide compounds and functional anthraquinones

IN Finter, Jurgen, Freiburg, Germany, Federal Republic of
Fischer, Walter, Reinach, Switzerland
Lohse, Friedrich, Oberwil, Switzerland

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 4657842 19870414

AI US 85-795029 19851104 (6)

RLI Continuation of Ser. No. US 83-551767, filed on 14 Nov 1983, now abandoned

PRAI CH 82-6870 19821125

DT Utility

EXNAM Primary Examiner: Kittle, John E.; Assistant Examiner: Hamilton, Cynthia

LREP Glynn, Michael W.; Fishman, Irving M.

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 739

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Photosensitive compositions of matter which are capable of undergoing condensation or addition reactions and may or may not be crosslinkable, and which contain an anthraquinone of the formula I ##STR1## in which

X,

X', R' and R" are as defined in patent claim 1 and X or X' is, for example, --OH or --NH.sub.2, at least one monomeric, oligomeric or polymeric compound which can be reacted with this anthraquinone, for example, if X is --OH, a polymer with terminal glycidyl groups, and, where relevant, a crosslinking agent and/or a salt of a metal of group Ib or VIII of the periodic table, are suitable for image formation by means of electroless metal deposition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(photoimaging compn. contg., for metal images by electroless deposition

)

=> D BIB ABS HITRN 12

L31 ANSWER 12 OF 20 USPATFULL

AN 85:8839 USPATFULL

TI Aromatic polyamide paper-like sheet and processes for producing the same

IN Sasaki, Hideharu, Iwakuni, Japan
Shimada, Keizo, Iwakuni, Japan

PA Teijin Limited, Osaka, Japan (non-U.S. corporation)

PI US 4498957 19850212

AI US 83-532304 19830915 (6)

RLI Continuation of Ser. No. US 82-341540, filed on 21 Jan 1982, now abandoned which is a continuation of Ser. No. US 80-144341, filed on 28 Apr 1980, now abandoned

PRAI JP 79-55640 19790509

JP 79-64938 19790828

DT Utility

EXNAM Primary Examiner: Chin, Peter

LREP Burgess, Ryan and Wayne

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 810

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An aromatic polyamide paper-like sheet having excellent heat- and chemical- resistances and electric insulating properties, comprises an artificial pulp ingredient comprising a number of amorphous pulp particles consisting of an aromatic polyamide material, and a fiber ingredient consisting of a number of short fibers bonded to each other with the amorphous pulp particles, the ratio in weight of the artificial pulp ingredient to the fiber ingredient being in a range of from 1:9 to 9:1 and the aromatic polyamide molecules contained at least in the amorphous pulp particles being cross-linked with a cross-linking agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(polyisophthalamide fiber crosslinked by, paper substitutes from)

=> D BIB ABS HITRN 13

L31 ANSWER 13 OF 20 USPATFULL

AN 84:34438 USPATFULL

TI Tetrahydropyrimidine-isocyanate addition products

IN Meyer, Rolf-Volker, Krefeld, Germany, Federal Republic of

Kreuder, Hans J., Krefeld, Germany, Federal Republic of

de Cleur, Eckhard, Duisburg, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
(non-U.S. corporation)

PI US 4455426 19840619

AI US 82-428852 19820930 (6)

RLI Division of Ser. No. US 81-317299, filed on 2 Nov 1981, now patented,
Pat. No. US 4424353

PRAI DE 80-3041834 19801106

DT Utility

EXNAM Primary Examiner: Daus, Donald G.; Assistant Examiner: Rivers, Diana G.

LREP Connolly and Hutz

CLMN Number of Claims: 2

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1062

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New amidine/isocyanate adducts are particularly useful as catalysts for
hardening epoxy resins, in particular pulverulent coating compositions
based on epoxy resins. New bicyclic amidines are excellent starting
materials for manufacturing these amidine/isocyanate adducts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(coatings, curing agents for, amidine-isocyanate adducts as)

=> D BIB ABS HITRN 14

L31 ANSWER 14 OF 20 USPATFULL

AN 84:34437 USPATFULL

TI Bicyclic amidine-isocyanate adducts

IN Meyer, Rolf-Volker, Krefeld, Germany, Federal Republic of
Kreuder, Hans J., Krefeld, Germany, Federal Republic of
de Cleur, Eckhard, Duisburg, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
(non-U.S. corporation)

PI US 4455425 19840619

AI US 82-423025 19820924 (6)

RLI Division of Ser. No. US 81-317299, filed on 2 Nov 1981, now patented,
Pat. No. US 4424353

PRAI DE 80-3041834 19801106

DT Utility

EXNAM Primary Examiner: Daus, Donald G.; Assistant Examiner: Rivers, Diana G.

LREP Connolly and Hutz

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1053

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New amidine/isocyanate adducts are particularly useful as catalysts for
hardening epoxy resins, in particular pulverulent coating compositions
based on epoxy resins. New bicyclic amidines are excellent starting
materials for manufacturing these amidine/isocyanate adducts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(coatings, curing agents for, amidine-isocyanate adducts as)

=> D BIB ABS HITRN 15

L31 ANSWER 15 OF 20 USPATFULL

AN 84:941 USPATFULL

TI Bicyclic amidines

IN Meyer, Rolf-Volker, Krefeld, Germany, Federal Republic of
Kreuder, Hans J., Krefeld, Germany, Federal Republic of
de Cleur, Eckhard, Duisburg, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
(non-U.S. corporation)

PI US 4424353 19840103

AI US 81-317299 19811102 (6)

PRAI DE 80-3041834 19801106

DT Utility

EXNAM Primary Examiner: Rivers, Diana G.

LREP Connolly and Hutz

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1050

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New amidine/isocyanate adducts are particularly useful as catalysts for
hardening epoxy resins, in particular pulverulent coating compositions
based on epoxy resins. New bicyclic amidines are excellent starting
materials for manufacturing these amidine/isocyanate adducts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(coatings, curing agents for, amidine-isocyanate adducts as)

=> D BIB ABS HITRN 16

L31 ANSWER 16 OF 20 USPATFULL

AN 83:29046 USPATFULL

TI Isocyanuric acid derivatives, method of preparation, therapeutic compositions with a cytostatic action and therapeutic method

IN Fischer, Herbert, Dusseldorf, Germany, Federal Republic of
Budnowski, Manfred, Dusseldorf, Germany, Federal Republic of
Zeidler, Ulrich, Dusseldorf, Germany, Federal Republic of

PA Henkel Kommanditgesellschaft auf Aktien, Dusseldorf-Holthausen,
Germany,

Federal Republic of (non-U.S. corporation)

PI US 4393060 19830712

AI US 80-194908 19801007 (6)

PRAI AT 79-6552 19791008

DT Utility

EXNAM Primary Examiner: Ford, John M.

LREP Hammond & Littell, Weissenberger and Muserlian

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1127

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB N-substituted-diglycidyl-isocyanurates having the formula: ##STR1##
wherein R represents a hydrocarbon-containing radical selected from the
group consisting of alkyl, aryl, aralkyl, alkaryl and cycloalkyl,
optionally containing:

(a) heterocycles except epoxides, and unsaturation, and

(b) substituents selected from the group consisting of halogen,
hydroxyl, amino, N-substituted amino, mercapto, alkylmercapto,
arylmercapto, alkylsulfoxy, arylsulfoxy, alkoxy, aryloxy and acyloxy,

and R.sub.1 represents a member selected from the group consisting of
hydrogen and alkyl having from 1 to 4 carbon atoms, as well as the
method for preparing said N-substituted-diglycidyl-isocyanurates,
therapeutic compositions with cytostatic action comprising said
N-substituted-diglycidyl-isocyanurates, and a method of treatment of
malignant neoplasias in warm-blooded animals by administering a
therapeutically effective amount of said N-substituted-diglycidyl-
isocyanurate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9P

(prepn. and hydrolysis of)

=> D BIB ABS HITRN 17

L31 ANSWER 17 OF 20 USPATFULL

AN 83:5489 USPATFULL

TI Piperidine derivatives and their use as polymer stabilizers

IN Soma, Nobuo, Hiromachi, Japan

Moromura, Syoji, Hiromachi, Japan

Yoshioka, Takao, Hiromachi, Japan

Kurumada, Tomoyuki, Hiromachi, Japan

PA Sankyo Company Ltd., Tokyo, Japan (non-U.S. corporation)

PI US 4371644 19830201

AI US 80-168271 19800710 (6)

RLI Division of Ser. No. US 78-866957, filed on 5 Jan 1978, now abandoned

PRAI JP 77-3285 19770114

DT Utility

EXNAM Primary Examiner: Kight, III, John; Assistant Examiner: White, R. A.

LREP Toren, McGeady and Stanger

CLMN Number of Claims: 4

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1518

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Piperidine derivatives in which two or three piperidine residues each substituted at the 2- and the 6-position by two methyl groups or by one methyl group and one ethyl group, the piperidine residues being attached

by means of substituted alkylene groups, by means of polyoxyalkylene groups (whose oxyalkylene chain is optionally interrupted by one or more

phenylene or cyclohexylene groups), by means of substituted isocyanurate

groups or by means of glyceryl groups, and acid addition salts thereof are valuable as stabilizers for synthetic polymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(reaction of, with piperidine derivs.)

=> D BIB ABS HITRN 18

L31 ANSWER 18 OF 20 USPATFULL

AN 82:20155 USPATFULL

TI Acicular aluminium salts of carboxylic acids and processes for their preparation

IN Lohse, Friedrich, Oberwil, Switzerland

Schmid, Rolf, Gelterkinden, Switzerland

Fatzer, Willy, Bottmingen all of, Switzerland

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 4327032 19820427

AI US 80-109716 19800104 (6)

PRAI CH 79-403 19790116

CH 79-404 19790116

DT Utility

EXNAM Primary Examiner: Sneed, Helen M. S.

LREP Falber, Harry

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 730

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Aluminium monohydroxide salts of a carboxylic acid which are free from water of **crystallization** and have the formula ##STR1## or contain the structural element of the formula ##STR2## in which R is methyl, ethyl or phenyl or R.sup.1 is the divalent group --C.sub.n H.sub.2n --, in which n is a number from 3 to 10, and which can also be in the form of a dimer, have an acicular to rod-shaped **crystal** form. They are suitable as fillers for polymers, especially as reinforcing fillers for elastomeric epoxide resins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 75212-77-0

(acicular fillers for tough and strong)

=> D BIB ABS HITRN 19

L31 ANSWER 19 OF 20 USPATFULL

AN 79:32365 USPATFULL

TI Hydantoin derivatives and their use as polymer stabilizers

IN Soma, Nobuo, Hiromachi, Japan

Morimura, Syoji, Hiromachi, Japan

Yoshioka, Takao, Hiromachi, Japan

Kurumada, Tomoyuki, Hiromachi, Japan

PA Sankyo Company Limited, Tokyo, Japan (non-U.S. corporation)

PI US 4162246 19790724

AI US 77-860172 19771213 (5)

PRAI JP 76-157784 19761227

DT Utility

EXNAM Primary Examiner: Taylor, Hosea E.; Assistant Examiner: White, R. A.

LREP Toren, McGeady and Stanger

CLMN Number of Claims: 11

ECL Exemplary Claim: 9

DRWN No Drawings

LN.CNT 1419

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Hydantoin derivatives in which two or three piperidine spiro hydantoin residues are attached by means of substituted alkylene groups or polyoxyalkylene groups whose oxyalkylene chain is optionally interrupted

by one or more phenylene or cyclohexylene groups or by means of substituted isocyanurate or glyceryl groups and, where they exist, acid addition salts thereof, are valuable as stabilizers for synthetic polymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(reaction of, with triazaspirodecanedione derivs.)

=> D BIB ABS HITRN 20

L31 ANSWER 20 OF 20 USPATFULL

AN 78:63682 USPATFULL

TI Alkylthioalkanoyloxyalkyl and alkylthioalkyl substituted bis-hydantoin compounds

IN Dexter, Martin, Briarcliff Manor, NY, United States
Steinberg, David H., Bronx, NY, United States

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

PI US 4125516 19781114

AI US 77-759967 19770117 (5)

RLI Continuation of Ser. No. US 76-668879, filed on 22 Mar 1976, now abandoned

DT Utility

EXNAM Primary Examiner: Trousof, Natalie

LREP Hall, Luther A. R.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1,7

DRWN No Drawings

LN.CNT 885

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Alkylthioalkanoyloxyalkyl and alkylthioalkyl derivatives of
N-heterocyclic moieties are stabilizers for organic materials subject
to

oxidative, thermal and/or light induced deterioration. They are
prepared

by classical transesterification, oxirane ring opening and addition of
mercaptan to olefin reactions. Typical embodiments are
tris[2-(3-n-dodecythiopropionyloxy)ethyl isocyanurate] and
3-(3-n-dodecylthio-2-hydroxypropyl)-5,5-dimethylhydantoin. These
compounds are used in conjunction with phenolic antioxidants to
stabilize organic materials, particularly polyolefins and hydrocarbon
compositions, against the deleterious effects of heat and oxygen and
against discoloration.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 2451-62-9

(reaction of, with dodecyl mercaptan)

=> D HIS

(FILE 'HCAPLUS' ENTERED AT 09:45:16 ON 15 JUN 1999)
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 09:52:42 ON 15 JUN 1999

L1 1 S 2451-62-9
L2 742 S 46.492.1/RID AND 3 1.30.1/RID
L3 663 S L2 AND C12H15N3O6
L4 1 S 106-89-8
L5 516 S 108-80-5 OR 108-80-5/CRN
L6 17717 S 106-89-8/CRN
L7 17718 S L4 OR L6
L8 230 S 46.492.1/RID AND 3/CL
L9 34 S L8 AND 12/C
L10 23 S L9 AND 3/O
L11 8 S C12H18CL3N3O6
L12 5 S L11 AND L8
L13 3 S L3 AND BETA
L14 27 S L3 AND ALPHA

FILE 'CAPLUS' ENTERED AT 10:01:25 ON 15 JUN 1999

L15 1150 S L3
L16 50 S L15 AND (BETA)
L17 51 S L15 AND (ALPHA)
L18 23 S L16 AND L17
L19 2 S L3 AND L5 AND L7 AND L12

FILE 'CAOLD' ENTERED AT 10:07:42 ON 15 JUN 1999

L20 7 S L3
L21 0 S L20 AND ALPHA AND BETA
L22 0 S L3 AND L5 AND L12

FILE 'CASREACT' ENTERED AT 10:09:02 ON 15 JUN 1999

L23 2 S L3/PRO
L24 2 S L23 AND L5/RRT
L25 0 S L24 AND L12/RRT

FILE 'USPATFULL' ENTERED AT 10:09:27 ON 15 JUN 1999

L26 214 S L3
L27 64 S L26 AND ALPHA AND BETA
L28 27 S L27 AND CRYSTAL?
L29 0 S L26 AND ALPHA(8A)CRYSTAL? AND BETA(8A)CRYSTAL?
L30 0 S L26 AND ALPHA(20A)CRYSTAL? AND BETA(20A)CRYSTAL?
L31 20 S L26 AND ALPHA(9A)BETA AND CRYSTAL?
L32 0 S L3/P AND L12
L33 0 S L13

FILE 'CAPLUS' ENTERED AT 10:21:40 ON 15 JUN 1999

L34 14 S L13
L35 13 S L13 AND L14
L36 6 S L35 NOT L18

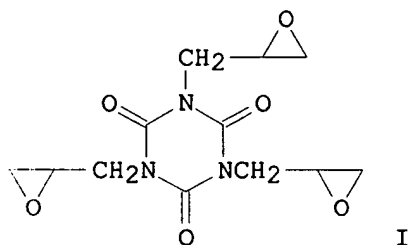
FILE 'CAOLD' ENTERED AT 10:23:02 ON 15 JUN 1999

L37 0 S L13 AND L14

=> D BIB ABS HITSTR

L19 ANSWER 1 OF 2 CAPLUS COPYRIGHT 1999 ACS
AN 1976:478166 CAPLUS
DN 85:78166
TI Triglycidyl isocyanurate
IN Aramaki, Masato; Nakano, Kazuo; Fujita, Takao
PA Nissan Chemical Industries, Ltd., Japan
SO Japan. Kokai, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

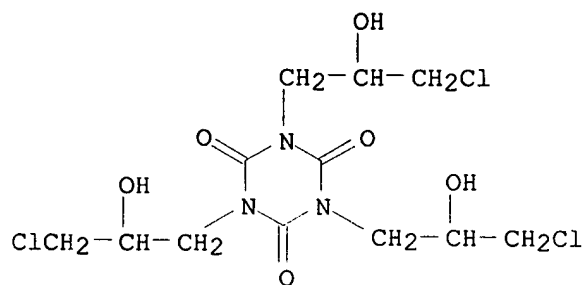
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| | ----- | | ----- | ----- | ----- |
| PI | JP 50160287 | A2 | 19751225 | JP 74-68099 | 19740617 |
| GI | | | | | |



AB Triglycidyl isocyanurate (I) was prepd. by reaction of 1 mole cyanuric acid (II) with 6-24 moles epichlorohydrin (III) in the presence of 0.001-0.2 mole catalysts (tertiary amines, quaternary ammonium hydroxides, and quaternary ammonium halides) and 0.2-12 moles H2O via tris(3-chloro-2-hydroxypropyl) isocyanurate. The reaction was effected by the rise in the temp. of the reaction mixt. caused by azeotropic removal of H2O with III. Thus, a mixt. of H2O 69.4, Me4N+ Cl- 5.5, III 1388, and II 129 g was heated 45 min at 89-121.degree. with azeotropic removal of H2O-III and recycle of III to give 75% I.

IT 7423-53-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and dehydrochlorination of)

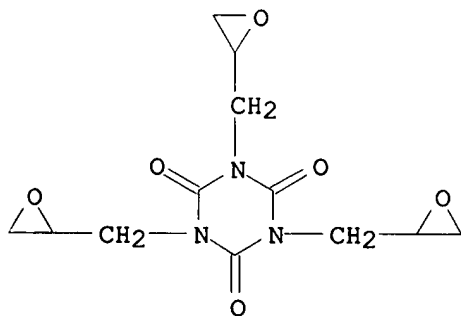
RN 7423-53-2 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(3-chloro-2-hydroxypropyl)- (9CI) (CA INDEX NAME)



IT 2451-62-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 2451-62-9 CAPLUS

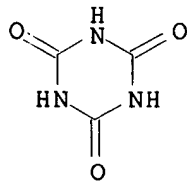
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)

IT 108-80-5

RL: RCT (Reactant)
(reaction of, with epichlorohydrin)

RN 108-80-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

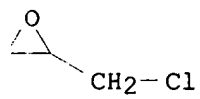


IT 106-89-8, reactions

RL: RCT (Reactant)
(with cyanuric acid)

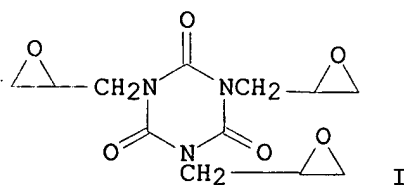
RN 106-89-8 CAPLUS

CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



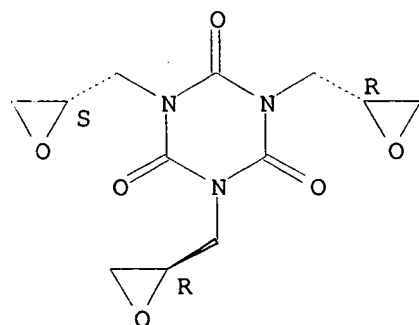
=> D BIB ABS HITSTR 2

L19 ANSWER 2 OF 2 CAPLUS COPYRIGHT 1999 ACS
AN 1976:421303 CAPLUS
DN 85:21303
TI Isomers of triglycidyl isocyanurate. I
AU Joel, Detlef; Becker, Hans
CS Zentralinst. Org. Chem., DAW, Berlin, E. Ger.
SO Plaste Kautsch. (1976), 23(4), 237-9
CODEN: PLKAAM
DT Journal
LA German
GI



AB Cyanuric acid reacted with excess epichlorohydrin to give, via tris(3-chloro-2-hydroxypropyl) isocyanurate, isocyanurate I as the diastereoisomeric racemates. Repeated extn. of I with hot MeOH gave .alpha.-I. Four-fold recrystn. of the residue from CHCl₃ gave .beta.-I. The phys. properties, e.g., refractive index, crystal form, d., and thermal properties, of both isomers were detd.
IT 59653-73-5P 59653-74-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and phys. properties of)
RN 59653-73-5 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

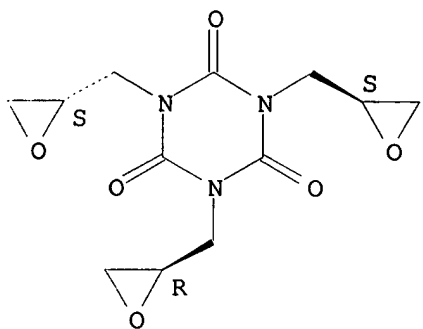
Relative stereochemistry.
Currently available stereo shown.



RN 59653-74-6 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-,

stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

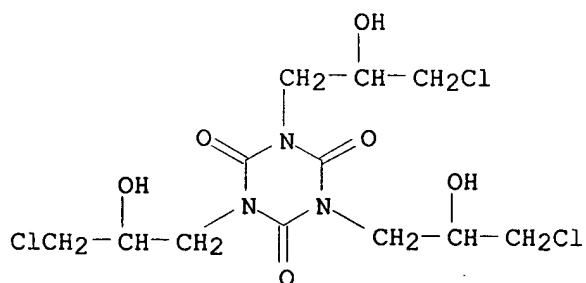


IT 7423-53-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction with epichlorohydrin)

RN 7423-53-2 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(3-chloro-2-hydroxypropyl)- (9CI) (CA INDEX NAME)

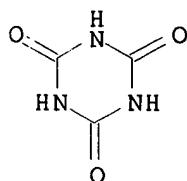


IT 108-80-5

RL: RCT (Reactant)
(reaction of, with epichlorohydrin)

RN 108-80-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

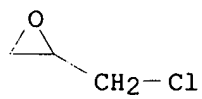


IT 106-89-8, reactions

RL: RCT (Reactant)
(with cyanuric acid)

RN 106-89-8 CAPLUS

CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



=> D HIS

(FILE 'HOME' ENTERED AT 09:42:23 ON 15 JUN 1999)

FILE 'HCAPLUS' ENTERED AT 09:42:29 ON 15 JUN 1999

L1 3087 S IKEDA H?/AU
L2 92 S GUNJI Y?/AU
L3 349 S KODA T?/AU
L4 306 S HIDAKA M?/AU
L5 494 S AOKI A?/AU
L6 0 S L1 AND L2 AND L3 AND L4 AND L5
L7 4309 S L1-L6
L8 23 S L7 AND ISOCYANURAT?
L9 13 S L8 AND (BETA OR B)
L10 9 S L9 AND (EPOXY OR OXIRAN?)
SELECT RN L10 1-9

FILE 'HCAPLUS' ENTERED AT 09:43:54 ON 15 JUN 1999

FILE 'REGISTRY' ENTERED AT 09:44:35 ON 15 JUN 1999

L11 83 S E1-83
L12 29 S L11 AND NCNCNC/ES
L13 35 S L11 AND OC2/ES
L14 39 S L12 OR L13

FILE 'HCAPLUS' ENTERED AT 09:45:16 ON 15 JUN 1999

L15 9 S L10 AND L14

Inventor Search

=> D BIB ABS HITSTR

L15 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1998:147100 HCAPLUS

DN 128:154000

TI Method for producing high-purity epoxy compounds such as bis(2,3-epoxypropyl) terephthalate and tris(2,3-epoxypropyl) isocyanurate

IN Tsukamoto, Suketoshi; Ono, Takami; Ikeda, Hisao; Hidaka, Motohiko

PA Nissan Chemical Industries Ltd., Japan

SO Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | EP 822189 | A2 | 19980204 | EP 97-111848 | 19970711 |
| | EP 822189 | A3 | 19980225 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 10212280 | A2 | 19980811 | JP 97-182289 | 19970708 |
| | AU 9728524 | A1 | 19980129 | AU 97-28524 | 19970709 |
| | US 5892065 | A | 19990406 | US 97-892198 | 19970714 |
| | CN 1172806 | A | 19980211 | CN 97-115595 | 19970721 |
| PRAI | JP 96-190574 | | 19960719 | | |
| | JP 96-263320 | | 19961003 | | |
| | JP 96-263321 | | 19961003 | | |
| | JP 96-293769 | | 19961106 | | |
| | JP 96-293770 | | 19961106 | | |
| | JP 96-314682 | | 19961126 | | |
| | JP 96-314683 | | 19961126 | | |

OS CASREACT 128:154000

AB Title epoxy compds., or more generally 2,3-epoxypropyl or 2-methyl-2,3-epoxypropyl derivs. of compds. with carboxyl or amido groups,

are produced by an improved process giving higher purity and heat stability. The method gives purified products. having an epoxide equiv. of 1.0-1.1 times the theor. epoxide equiv. of the deriv., an ionic

halogen

content of 10 ppm or less, transparency when molten, and stability against

increase in the epoxide equiv. when stored at 150.degree.C for 24 h. The process comprises 4 steps. In the first step (A), 1.2-60 mol of an epihalohydrin or 2-methylepihalohydrin reacts with 1 mol of active hydrogen atoms (of the carboxyl or amido group) in the presence of a catalytic amt. of a tertiary amine, a quaternary ammonium base or salt, a tri-substituted phosphine, or a quaternary phosphonium salt, thereby forming a reaction product contg. a 2-hydroxy-3-halopropyl deriv. or a 2-hydroxy-2-methyl-3-halopropyl deriv. In the second step (B), the above deriv. is dehydrohalogenated by adding an alkali metal

hydroxide

while agitating the resulting slurry contg. a pptd. alkali metal halide, thereby forming a final slurry contg. the product and the alkali metal halide. In the third step (C), the final slurry from step B, or the liq. product formed by removing the alkali metal halide from the

final

slurry, is washed with an aq. soln. of a refining agent. The refining agent may be a sulfonic acid or salt, a salt of a C7+ carboxylic acid, a salt of a C4+ alc. sulfate, or a mixt. thereof having a soly. of at most

1

wt.% in water at 30.degree.C. In the fourth and final step (D), the epihalohydrin or 2-methylepihalohidrin is removed from the refined liq., giving the purified product. For instance, epichlorohydrin reacted with terephthalic acid in H2O in the presence of Et4N+ Br- under reflux conditions (89.degree.-121.degree.) with gradual removal of H2O. The mixt. was cooled to 45.degree. and treated dropwise with aq. 50% NaOH under reduced pressure with removal of H2O. The resultant slurry of product and NaCl in epichlorohydrin was treated with H2O and Na toluenesulfonate, and the sepd. epichlorohydrin layer was extd. with aq. NaH2PO4 and Na toluenesulfonate, then with H2O alone. Removal of the epichlorohydrin under reduced pressure down to 2 mmHg at temps. up to 140.degree. gave bis(2,3-epoxypropyl) terephthalate (I) in 92% yield.

The

product had no ionic Cl, an epoxide equiv. of 146, kaolin turbidity of 1 or less when molten at 140.degree., and an epoxide equiv. of 148 (1.4% increase) after heating for 24 h at 150.degree. in a sealed vessel. The product was crystd. from MeOH to give similar results, with an even lower increase in epoxide equiv. upon heating (0.7%). A similar run without

use

of Na toluenesulfonate gave, in slightly lower yield, I showing 5 ppm ionic Cl, epoxide equiv. 151, kaolin turbidity of 2, and epoxide equiv. 158 (4.6% increase) after heating. Crystn. of this product also lowered the epoxide equiv. increase upon heating, but only to 2%.

IT

2451-62-9P, Tris(2,3-epoxypropyl) isocyanurate
7195-44-0P, Bis(2,3-epoxypropyl) terephthalate 26157-73-3P
, Tris(2-methyl-2,3-epoxypropyl) isocyanurate
71327-04-3P, Bis(2-methyl-2,3-epoxypropyl) terephthalate

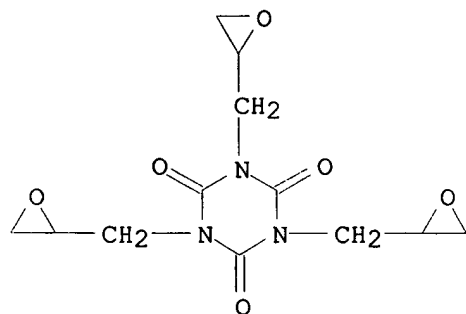
RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of high-purity epoxy-contg. esters and amides)

RN

2451-62-9 HCAPLUS

CN

1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)

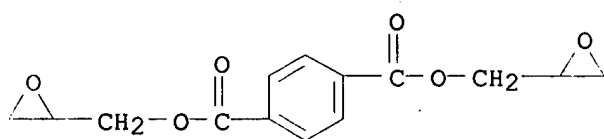


RN

7195-44-0 HCAPLUS

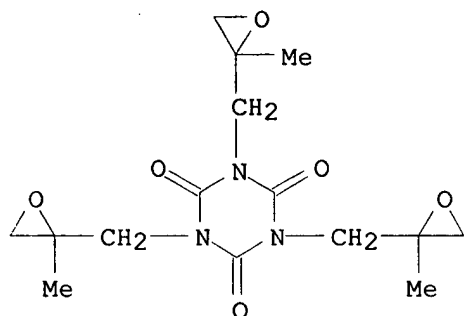
CN

1,4-Benzenedicarboxylic acid, bis(oxiranylmethyl) ester (9CI) (CA INDEX NAME)



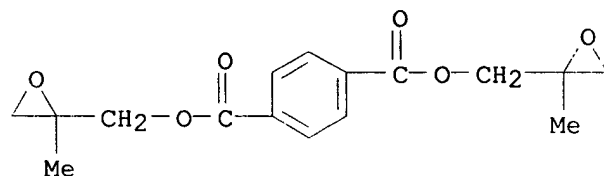
RN 26157-73-3 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris[(2-methyloxiranylmethyl)- (9CI) (CA INDEX NAME)



RN 71327-04-3 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, bis[(2-methyloxiranylmethyl) ester (9CI) (CA INDEX NAME)



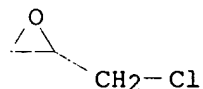
IT 106-89-8, Epichlorohydrin, reactions 108-80-5,
Isocyanuric acid 598-09-4, 2-Methylepichlorohydrin

RL: RCT (Reactant)

(starting material; prepn. of high-purity epoxy-contg. esters
and amides)

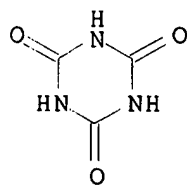
RN 106-89-8 HCAPLUS

CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



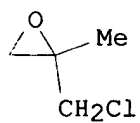
RN 108-80-5 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)



RN 598-09-4 HCAPLUS

CN Oxirane, 2-(chloromethyl)-2-methyl- (9CI) (CA INDEX NAME)



=> D BIB ABS HITSTR 2

L15 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:501832 HCAPLUS

DN 127:177277

TI **Epoxy** resin compositions for fire- and heat-resistant laminates.

IN Ikeda, Hisao; Yoshida, Toshinari

PA Nissan Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 09183831 | A2 | 19970715 | JP 95-342499 | 19951228 |

AB Title comps. comprise (A) triglycidyl **isocyanurate**, (B) 0.4-4 parts (for 1 part A) **epoxy** resins contg. .gtoreq.2 **epoxy** groups, (C) novolaks with OH equiv. 0.85-1.1 for 1 equiv **epoxy** groups of A and B, (D) 0.0005-0.05 part (for 1 part of A and B) curing accelerators, and (E) aprotic polar solvents. The comps. are useful for printed circuit boards and fiber-reinforced composites. Thus, impregnating a glass cloth with a compn. contg. TEPIC L 50, YDB 400 50, TD 2093Y (phenol novolak) 65, Ph3P 0.2, acetonitrile 37, and MEK 73 parts, laminating the resulting prepreps, and pressing the laminate gave a test piece showing good fire and heat resistance and good storage stability.

IT 194029-40-8P 194029-64-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (**epoxy** resin comps. contg. triglycidyl **isocyanurate** for heat-resistant laminates)

RN 194029-40-8 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis[2,6-dibromo-, polymer with (chloromethyl)oxirane and TD 2093Y (9CI) (CA INDEX NAME)

CM 1

CRN 193980-53-9

CMF Unspecified

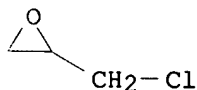
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 106-89-8

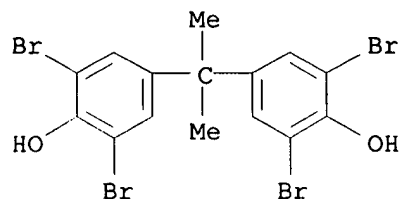
CMF C3 H5 Cl O



CM 3

CRN 79-94-7

CMF C15 H12 Br4 O2



RN 194029-64-6 HCAPLUS

CN Guanidine, cyano-, polymer with (chloromethyl)oxirane,
4,4'-(1-methylethylidene)bis[2,6-dibromophenol] and TD 2093Y (9CI) (CA
INDEX NAME)

CM 1

CRN 193980-53-9

CMF Unspecified

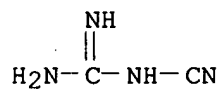
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 461-58-5

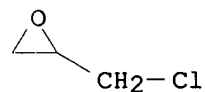
CMF C2 H4 N4



CM 3

CRN 106-89-8

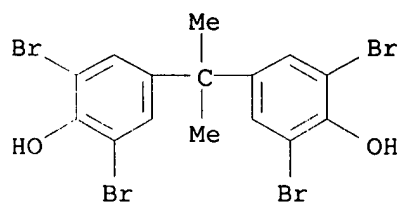
CMF C3 H5 Cl O



CM 4

CRN 79-94-7

CMF C15 H12 Br4 O2



IT 28825-96-9, TEPIC L

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(epoxy resin compns. contg. triglycidyl isocyanurate for heat-resistant laminates)

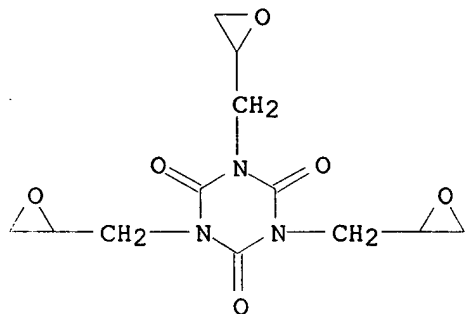
RN 28825-96-9 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2451-62-9

CMF C12 H15 N3 O6



=> D BIB ABS HITSTR 3

L15 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:112801 HCAPLUS

DN 126:118863

TI **Epoxy** resin compositions for heat-resistant laminated sheets

IN Ikeda, Hisao; Gunji, Yasuhiro; Koda, Toshinari

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------|----------|----------|-----------------|----------|
| PI | JP 08311162 | A2 | 19961126 | JP 96-41205 | 19960228 |
| PRAI | JP 95-57422 | 19950316 | | | |

AB Title comps. comprise (A) triglycidyl **isocyanurate**, (B) 0.4-4 parts [based on 1 part (A)] **epoxy** resins having .gtoreq.2 **epoxy** groups in a mol., (C) 0.9-1.1 equiv [based on 1 equiv **epoxy** groups of [(A) + (B)]] diaminodiphenyl sulfones, (D) 0.001-0.05 part [based on 1 part [(A) + (B)]] curing accelerators, and (E) non-protonic polar solvents. Thus, a compn. contg. TEPIC-L 35, BREN S (bisphenol A-based **epoxy** resin) 65, 3,3'-diaminodiphenyl sulfone 17, 4,4'-diaminodiphenyl sulfone 18, catalyst

BF 3-400 1, solvent MeCN 50, and MEK 10 parts was impregnated into a glass cloth and pre-cured to give a prepreg, 9 pieces of which were laminated, placed between Cu foils, heat-pressed, and cured to give a laminated sheet with good heat resistance.

IT 186204-02-4P 186204-03-5P 186204-04-6P

RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**epoxy** resin comps. for heat-resistant laminated sheets used in printed circuit boards)

RN 186204-02-4 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with BREN-S, 3,3'-sulfonylbis[benzenamine] and 4,4'-sulfonylbis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 93195-67-6

CMF Unspecified

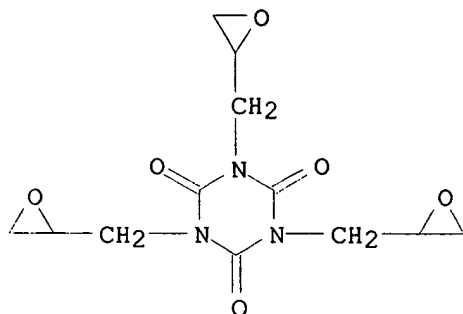
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2451-62-9

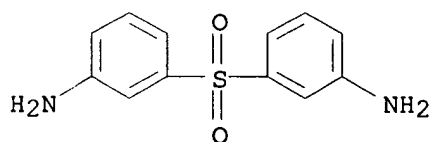
CMF C12 H15 N3 O6



CM 3

CRN 599-61-1

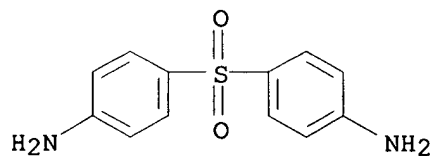
CMF C12 H12 N2 O2 S



CM 4

CRN 80-08-0

CMF C12 H12 N2 O2 S



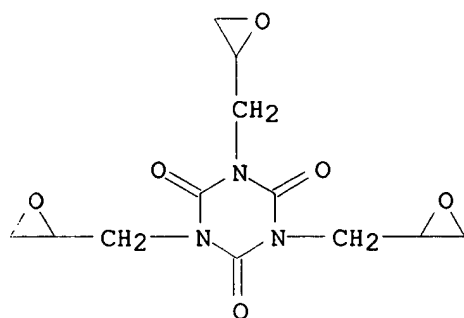
RN 186204-03-5 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol], 3,3'-sulfonylbis[benzenamine] and 4,4'-sulfonylbis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 2451-62-9

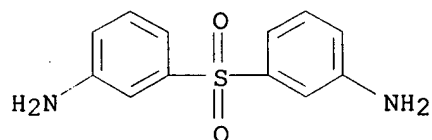
CMF C12 H15 N3 O6



CM 2

CRN 599-61-1

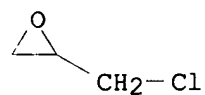
CMF C12 H12 N2 O2 S



CM 3

CRN 106-89-8

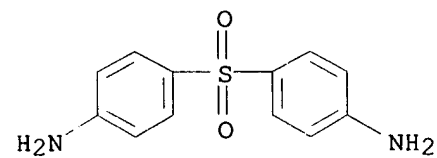
CMF C3 H5 Cl O



CM 4

CRN 80-08-0

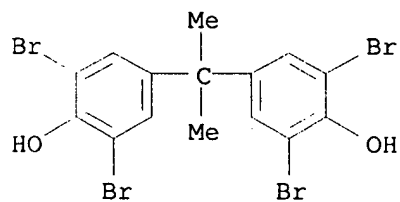
CMF C12 H12 N2 O2 S



CM 5

CRN 79-94-7

CMF C15 H12 Br4 O2



RN 186204-04-6 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], 3,3'-sulfonylbis[benzenamine] and 4,4'-sulfonylbis[benzenamine] (9CI)

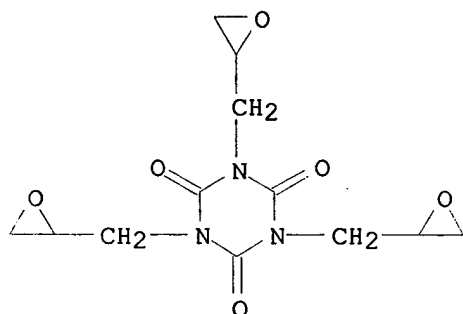
(CA

INDEX NAME)

CM 1

CRN 2451-62-9

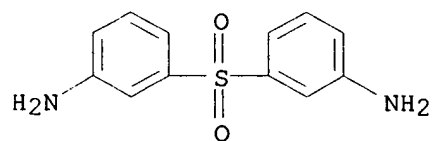
CMF C12 H15 N3 O6



CM 2

CRN 599-61-1

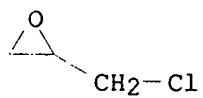
CMF C12 H12 N2 O2 S



CM 3

CRN 106-89-8

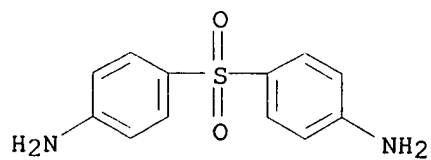
CMF C3 H5 Cl O



CM 4

CRN 80-08-0

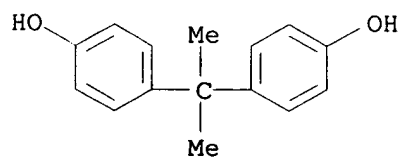
CMF C12 H12 N2 O2 S



CM 5

CRN 80-05-7

CMF C15 H16 O2



=> D BIB ABS HITSTR 4

L15 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1996:391589 HCAPLUS

DN 125:59986

TI Novel **epoxy** compounds with triazine ring skeleton and their manufacture

IN Myake, Satoshi; Ikeda, Hisao; Hidaka, Motohiko; Moro, Takeo

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

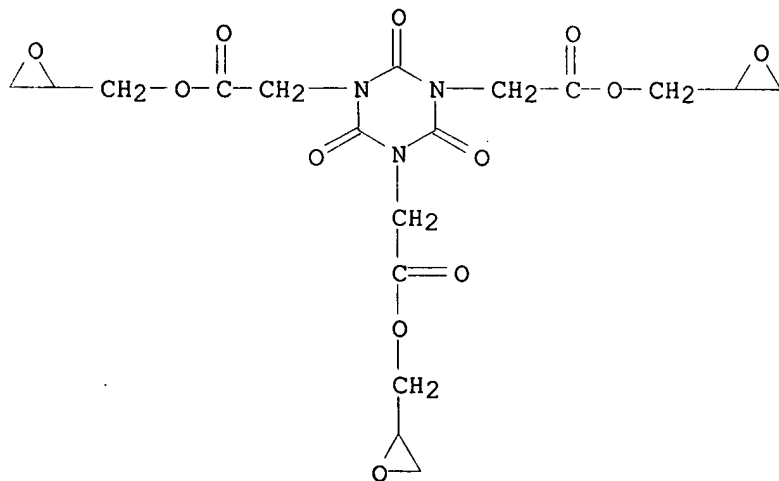
CODEN: JKXXAF

DT Patent

LA Japanese

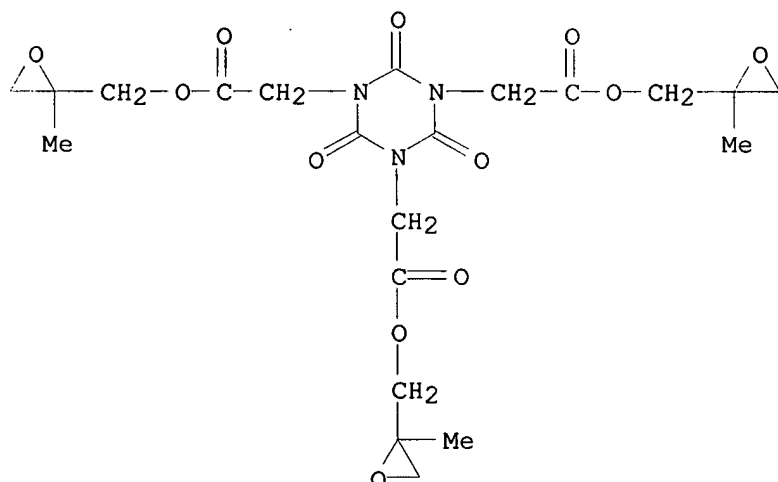
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | JP 08081461 | A2 | 19960326 | JP 94-217042 | 19940912 |
| OS | MARPAT 125:59986 | | | | |
| AB | The epoxy compds. with good workability, giving resins with good weather and heat resistance are manufd. by addn. reaction of tri(carboxyalkyl) isocyanurates with epihalohydrins and treating the resulting esters with an alkali substance. Refluxing tri(carboxymethyl) isocyanurate 101, .alpha.-epichlorohydrin 625, and Me4N+ Cl-3 g at 100.degree. and adding 120 g 50% NaOH over 3 h while removing the formed water and unreacted reactant gave tri(carboxymethyl) isocyanurate triglycidyl ester (I). I 100, Me himic anhydride 90.5, and DMP 30 3 parts gave a cured resin with glass temp. 195.degree.. | | | | |
| IT | 178200-12-9P 178200-13-0P 178200-14-1P RL: IMF (Industrial manufacture); PREP (Preparation) (manuf. of novel epoxy compds. with triazine ring skeleton for resins with good heat and weather resistance) | | | | |
| RN | 178200-12-9 HCAPLUS | | | | |
| CN | 1,3,5-Triazine-1,3,5(2H,4H,6H)-triacetic acid, 2,4,6-trioxo-, tris(oxiranylmethyl) ester (9CI) (CA INDEX NAME) | | | | |



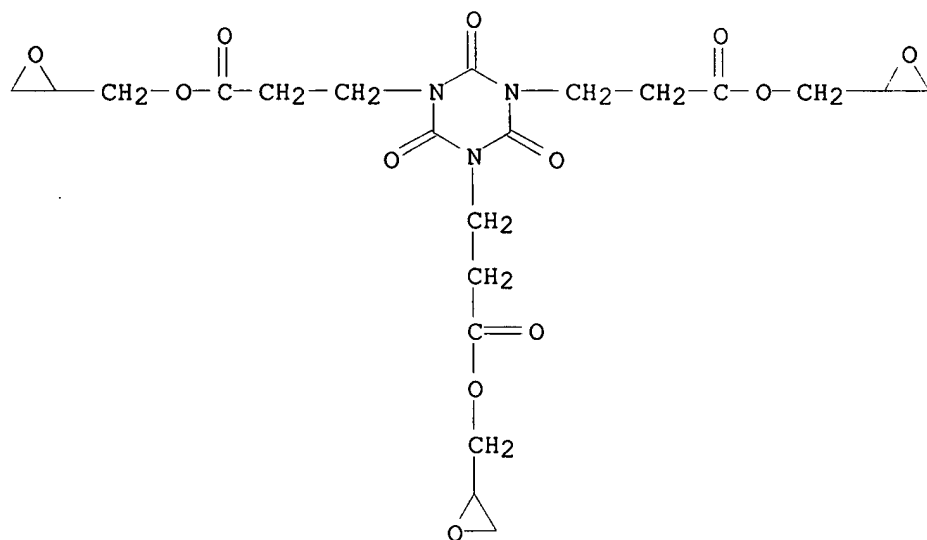
RN 178200-13-0 HCAPLUS

CN 1,3,5-Triazine-1,3,5(2H,4H,6H)-triacetic acid, 2,4,6-trioxo-,
tris[(2-methyloxiranyl)methyl] ester (9CI) (CA INDEX NAME)



RN 178200-14-1 HCAPLUS

CN 1,3,5-Triazine-1,3,5(2H,4H,6H)-tripropanoic acid, 2,4,6-trioxo-,
tris(oxiranylmethyl) ester (9CI) (CA INDEX NAME)



IT 178200-15-2P 178200-16-3P 178200-17-4P

RL: PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation)
(manuf. of novel **epoxy** compds. with triazine ring skeleton
for resins with good heat and weather resistance)

RN 178200-15-2 HCAPLUS

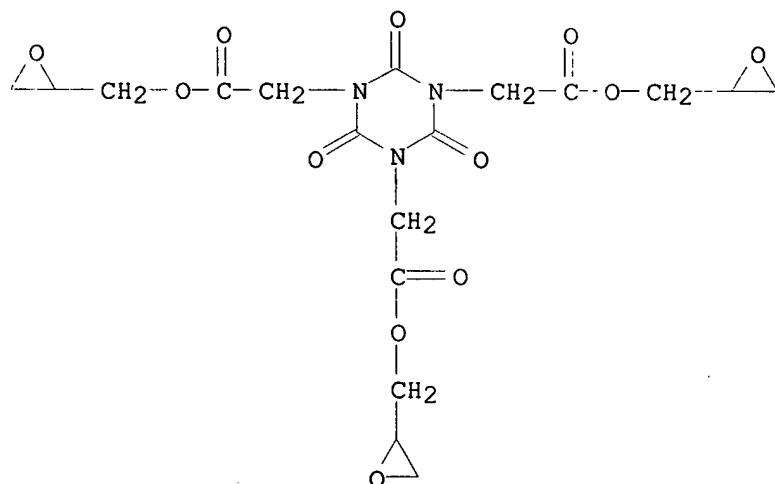
CN 1,3,5-Triazine-1,3,5(2H,4H,6H)-triacetic acid, 2,4,6-trioxo-,
tris(oxiranylmethyl) ester, polymer with

(3a.alpha.,4.beta.,7.beta.,7a.alp

ha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI)
(CA INDEX NAME)

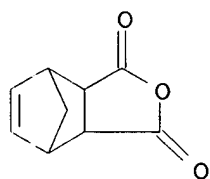
CM 1

CRN 178200-12-9
 CMF C18 H21 N3 O12



CM 2

CRN 53584-57-9
 CMF C10 H10 O3
 CCI IDS
 CDES *

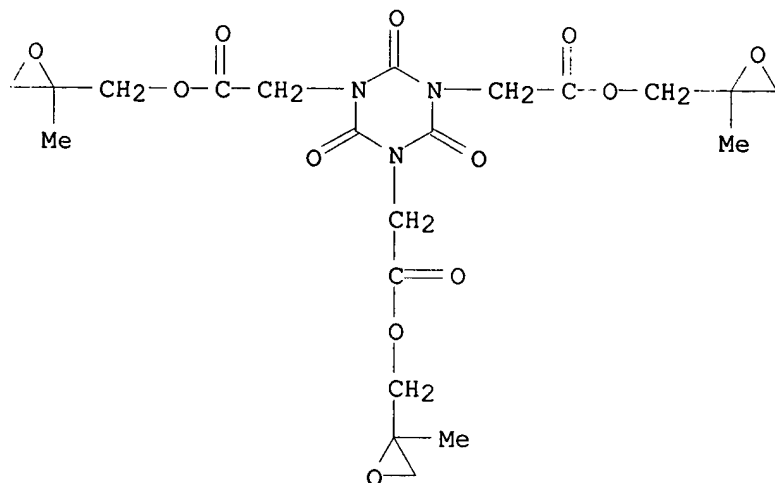


D1-Me

RN 178200-16-3 HCAPLUS
 CN 1,3,5-Triazine-1,3,5(2H,4H,6H)-triacetic acid, 2,4,6-trioxo-,
 tris[(2-methyloxiranyl)methyl] ester, polymer with
 (3a.alpha.,4.beta.,7.beta.,7a.alpha.)-3a,4,7,7a-tetrahydromethyl-4,7-
 methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME)

CM 1

CRN 178200-13-0
 CMF C21 H27 N3 O12



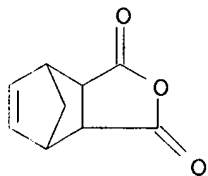
CM 2

CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

CDES *



D1-Me

RN 178200-17-4 HCAPLUS

CN 1,3,5-Triazine-1,3,5(2H,4H,6H)-tripropanoic acid, 2,4,6-trioxo-, tris(oxiranylmethyl) ester, polymer with

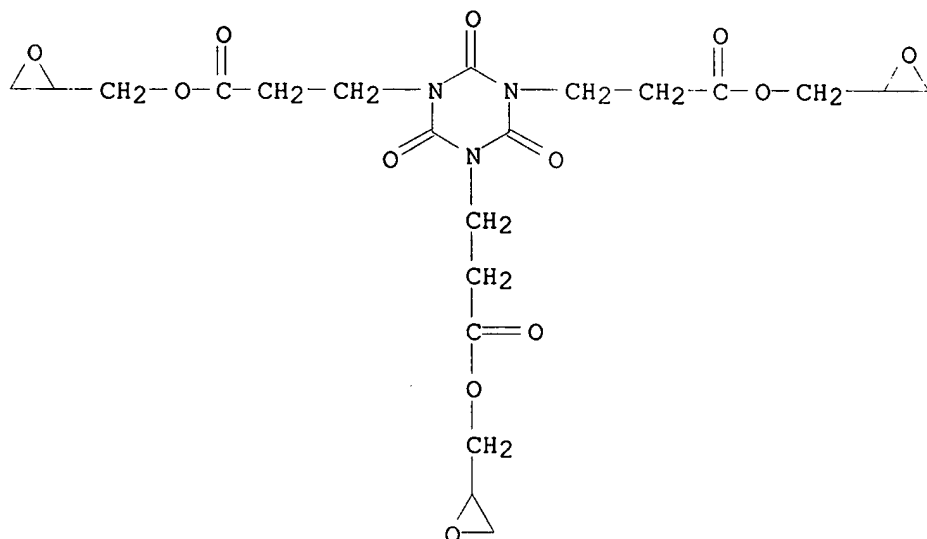
(3a.alpha.,4.beta.,7.beta.,7a.alp

ha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI)
(CA INDEX NAME)

CM 1

CRN 178200-14-1

CMF C21 H27 N3 O12



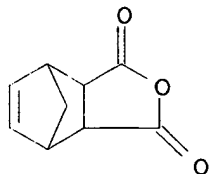
CM 2

CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

CDES *



D1-Me

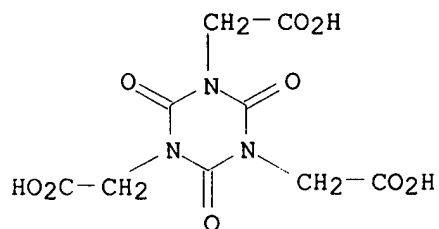
IT 1968-52-1 2904-41-8

RL: RCT (Reactant)

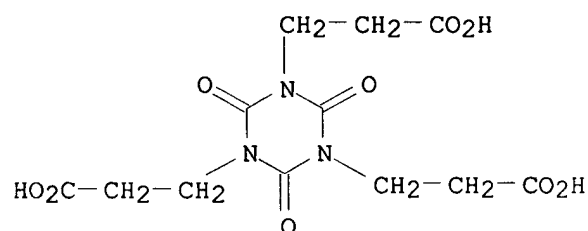
(reaction with epichlorohydrin; manuf. of novel **epoxy** compds.
with triazine ring skeleton for resins with good heat and weather
resistance)

RN 1968-52-1 HCAPLUS

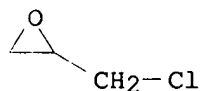
CN 1,3,5-Triazine-1,3,5(2H,4H,6H)-triacetic acid, 2,4,6-trioxo- (9CI) (CA
INDEX NAME)



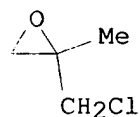
RN 2904-41-8 HCAPLUS
 CN 1,3,5-Triazine-1,3,5(2H,4H,6H)-tripropionic acid, 2,4,6-trioxo- (9CI)
 (CA INDEX NAME)



IT 106-89-8, reactions 598-09-4, .beta.
 -Methyl-epichlorohydrin
 RL: RCT (Reactant)
 (reaction with tri(carboxyalkyl)isocyanurate; manuf. of novel epoxy compds. with triazine ring skeleton for resins with good heat and weather resistance)
 RN 106-89-8 HCAPLUS
 CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



RN 598-09-4 HCAPLUS
 CN Oxirane, 2-(chloromethyl)-2-methyl- (9CI) (CA INDEX NAME)



=> D BIB ABS HITSTR 5

L15 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:663235 HCAPLUS

DN 123:230245

TI **Epoxy** resin compositions containing polyether-modified organopolysiloxanes

IN Ikeda, Hisao; Gunji, Yasuhiro; Hidaka, Motohiko

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 07097434 | A2 | 19950411 | JP 93-242602 | 19930929 |

AB The title compns. with improved resistance to heat and impact and elec. insulating property contain (A) tris(2,3-epoxypropoxy) **isocyanurate** (I), (B) **epoxy** resins, (C) polycarboxylic acid anhydrides, (D) (SiMe₂O)_r[SiMe(RZ)O]_s[SiMe(R₁O(C₂H₄O)_c(C₃H₆O)_dR₂)O]_t (II), and (E) (SiMe₂O)_r[SiMe(RX)O]_s[SiMe(R₁O(C₂H₄O)_c(C₃H₆O)_dR₂)O]_t (III) (R = divalent hydrocarbon; Z = H, **epoxy** group, glycidyloxy group; X = amino, carboxyl, OH, NCO; R₁ = divalent hydrocarbon; R₂ = H, monovalent hydrocarbon; c = 1-50, d = 1-50, r = 0-10, s = 1-10, t = 1-100, integral no., resp.) at ratio (i) (A) 100 parts and (B) 50-150 parts, (ii) equiv. ratio of R(CO)₂O group/[**epoxy** groups in (A) and (B)] 0.8-1.0 [R(CO)₂O is the (C) polycarboxylic acid anhydrides, R = hydrocarbon], (iii) (D)/[(A) + (B) + (C)] = 5-30/100, and (i.v.) (E)/[(A) + (B) + (C)] = 5-40/100. Compns. contg. inorg. powders and/or inorg. fibers at ratio 25-250 parts to 100 parts [(A) + (B) + (C) + (D)] are also claimed. Thus, a compn. comprising I (TEPIC-S) 18, Epikote 828 18, methylnadic acid anhydride 44, II (Z = **epoxy**) (X 22-3667) 10, III (X = amino) (X 22-3939A) 10 parts was blended at 100.degree., 0.6 part SA 5003 (PPh₃ benzyl bromide salt) was added and stirred at 80.degree. in vacuo to give a compn., which was cured at 100-180.degree. to give a test piece with good thermal cycling resistance.

IT 75-21-8P, Oxirane, preparation

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (reaction products with di-Me, glycidylalkyl Me, hydroxyethyl Me siloxanes, tris(epoxypropyl) **isocyanurate**, **epoxy** resins, and polycarboxylic acid anhydrides; with resistance to heat and impact and elec. insulating property)

RN 75-21-8 HCAPLUS

CN Oxirane (9CI) (CA INDEX NAME)

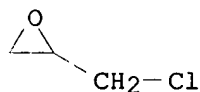


IT 25068-38-6DP, reaction products with tris(2,3-epoxypropyl)
isocyanurate, polycarboxylic acid anhydrides, and
polyether-modified organopolysiloxanes 28825-96-9DP, TEPIC-S,
reaction products with epoxy resins, polycarboxylic acid
anhydrides, and polyether-modified organopolysiloxanes
58421-55-9DP, reaction products with tris(2,3-epoxypropyl)
isocyanurate, polycarboxylic acid anhydrides, and
polyether-modified organopolysiloxanes
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(with resistance to heat and impact and elec. insulating property)
RN 25068-38-6 HCAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
(9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

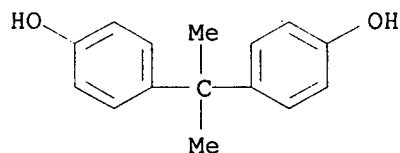
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2

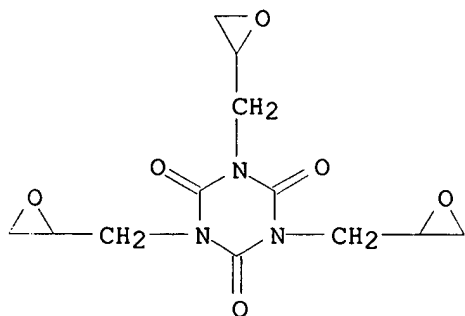


RN 28825-96-9 HCAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-,
homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2451-62-9

CMF C12 H15 N3 O6



RN 58421-55-9 HCAPLUS

CN Phenol, methylenebis-, polymer with (chloromethyl)oxirane (9CI) (CA

INDEX

NAME)

CM 1

CRN 1333-16-0

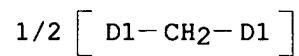
CMF C13 H12 O2

CCI IDS

CDES 8:ID



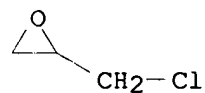
D1-OH



CM 2

CRN 106-89-8

CMF C3 H5 Cl O



=> D BIB ABS HITSTR 6

L15 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:511834 HCAPLUS

DN 123:24211

TI Solder resist ink composition

IN Ikeda, Hisao; Shirakawa, Masayoshi

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

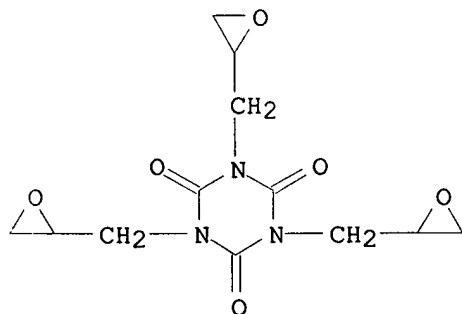
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----|--|------|----------|-----------------|----------|
| PI | JP 07041716 | A2 | 19950210 | JP 93-186345 | 19930728 |
| AB | The compn. contains (A) a photopolymerizable unsatd. group-contg. polycarbonate resin obtained by reaction of a novolak-type epoxy resin, an unsatd. monocarboxylic acid, and an org. polybasic anhydride, (B) a photopolymn. initiator, (C) tris(2,3-epoxypropyl) isocyanurate, and (D) melamine cyanurate. Solder resists obtained from the compn. showed good heat resistance in a solder bath. | | | | |
| IT | 2451-62-9, Tris(2,3-epoxypropyl) isocyanurate | | | | |
| RL: | TEM (Technical or engineered material use); USES (Uses) | | | | |
| | (TEPIC SP; solder resist ink compn. with good heat resistance in solder bath) | | | | |
| RN | 2451-62-9 HCAPLUS | | | | |
| CN | 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI) (CA INDEX NAME) | | | | |



IT 37640-57-6, Melamine cyanurate

RL: TEM (Technical or engineered material use); USES (Uses)
(hardener, MC 640; solder resist ink compn. with good heat resistance in solder bath)

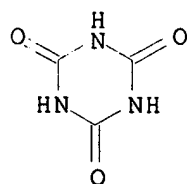
RN 37640-57-6 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, compd. with 1,3,5-triazine-2,4,6-triamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 108-80-5

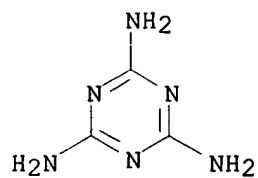
CMF C3 H3 N3 O3



CM 2

CRN 108-78-1

CMF C3 H6 N6



=> D BIB ABS HITSTR 7

L15 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:255747 HCAPLUS

DN 122:57524

TI Heat-, impact-, and thermal shock-resistant **epoxy** resin compositions

IN Ikeda, Hisao; Gunji, Yasuhiro

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----|--|------|----------|-----------------|----------|
| PI | JP 06248056 | A2 | 19940906 | JP 93-39788 | 19930301 |
| AB | The compns., useful for coatings, adhesives, laminates, etc., comprise | | | | |
| (A) | | | | | |

100 parts tris(2,3-epoxypropyl) **isocyanurate**, (B)

130-470 parts liq. rubbers obtained by reaction of 50-350 parts liq.

carboxy-contg. acrylonitrile-butadiene rubber and 80-120 parts

difunctional **epoxy** resins, (C) 0.8-1 equiv/equiv-total-epoxide

liq. polycarboxylic acid anhydrides, and (D) 0.001-2 parts crosslinking

accelerators. Thus, 300 parts Hycar CTBN 1300X31 and 100 parts Epikote

828 were treated at 120.degree. for 2 h in presence of Ph3P, blended with

100 parts TEPIC-S and 220 parts MHAC (methylhimic anhydride), and cured

at

100.degree. for 2 h and at 180.degree. for 7 h in an Al cup to give a

test

piece showing glass-transition temp. 170.degree., linear expansion coeff.

36 .times. 10⁻⁵, Izod impact strength 13 kg-cm/cm, water absorption 1.6%

after 100 h in boiling water, and good thermal shock resistance.

IT 25068-38-6D, Epikote 828, polymers with carboxy-terminated nitrile

rubber, tris(epoxypropyl) **isocyanurate**, and methylhimic

anhydride 28825-96-9D, TEPIC-S, polymers with **epoxy**

resins, carboxy-terminated nitrile rubber, and methylhimic anhydride

87435-51-6D, Epolite 3002, polymers with carboxy-terminated

nitrile rubber, tris(epoxypropyl) **isocyanurate**, and methylhimic

anhydride

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)

(heat- and impact- and thermal shock-resistant **epoxy** resin

compns.)

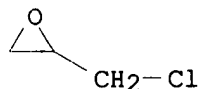
RN 25068-38-6 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
(9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

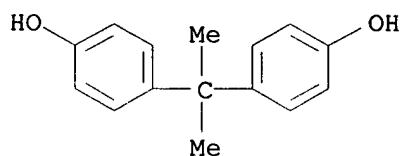
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



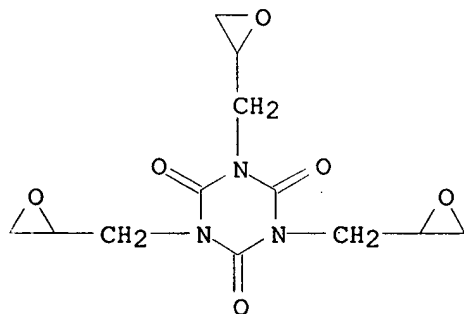
RN 28825-96-9 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2451-62-9

CMF C12 H15 N3 O6



RN 87435-51-6 HCAPLUS

=> D BIB ABS HITSTR 8.

L15 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:183959 HCAPLUS

DN 122:134952

TI One-component **epoxy** resin compositions

IN Ikeda, Hisao; Gunji, Yasuhiro

PA Nissan Chemical Ind Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | JP 06192396 | A2 | 19940712 | JP 92-346351 | 19921225 |
| AB | Compns. with good heat resistance, dielec. properties, and storage stability at room temp., useful for adhesives, laminates, etc., of electronic parts, comprise (A) 100 parts low-m.p. isomers found in tris(2,3-epoxypropyl) isocyanurate (I) with m.p. 98-107.degree. and epoxy equiv. wt. .ltoreq.105, (B) 10-150 parts bisphenol epoxy resins liq. at room temp., (C) 0.7-1.1 equiv (vs. total epoxy groups) liq. polycarboxylic acid anhydrides, and (D) 0.1-5% (on total epoxy) acetylacetone complex of Co or Al. Thus, I fraction (m.p. 98-107.degree., epoxy equiv. wt. 100) 50, Epikote 828 50, methylhimic anhydride 122, and Co tris(acetylacetone) 0.4 part were mixed to obtain a compn. showing storage stability >90 days at 23.degree., which was heated to give cured products showing glass-transition temp. 231.degree. and vol. resistivity at 23.degree. 80 .times. 10 ¹⁵ .OMEGA.-cm. | | | | |

IT 146189-70-0P 161220-61-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**epoxy** resin one-component compns. with good heat resistance and storage stability and elec. properties)

RN 146189-70-0 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and (3a.alpha.,4.beta.,7.beta.,7a.alpha.)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME)

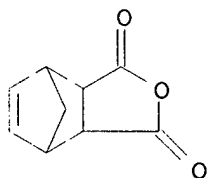
CM 1

CRN 53584-57-9

CMF C10 H10 O3

CCI IDS

CDES *

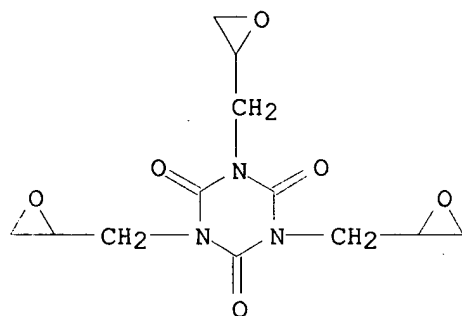


D1-Me

CM 2

CRN 2451-62-9

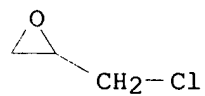
CMF C12 H15 N3 O6



CM 3

CRN 106-89-8

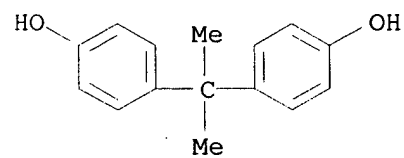
CMF C3 H5 Cl O



CM 4

CRN 80-05-7

CMF C15 H16 O2



RN 161220-61-7 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-,
polymer with (chloromethyl)oxirane,
hexahydromethyl-1,3-isobenzofurandione
and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

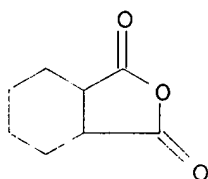
CM 1

CRN 25550-51-0

CMF C9 H12 O3

CCI IDS

CDES 8:ID

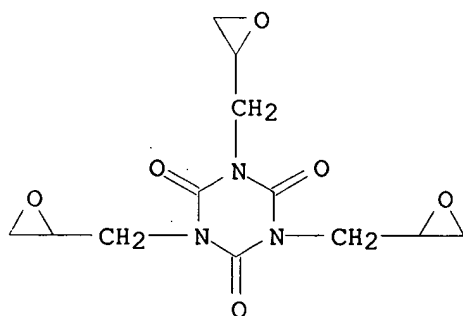


D1-Me

CM 2

CRN 2451-62-9

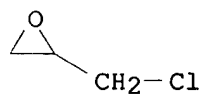
CMF C12 H15 N3 O6



CM 3

CRN 106-89-8

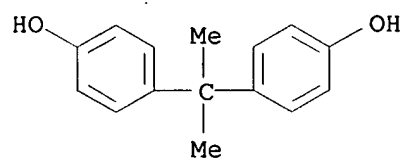
CMF C3 H5 Cl O



CM 4

CRN 80-05-7

CMF C15 H16 O2



=> D BIB ABS HITSTR 9

L15 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 1999 ACS

AN 1988:205939 HCAPLUS

DN 108:205939

TI Light-sensitive resin compositions for printed circuit board resists

IN Yokoyama, Yasuaki; Fukuhara, Seiji; Ikeda, Hiroharu

PA Japan Synthetic Rubber Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 62277422 | A2 | 19871202 | JP 86-120057 | 19860527 |

AB The title compns. with good elec. and mech. property, heat resistance, and interlayer adhesion to substrates comprise epoxidized resins (prepd. by epoxidizing reaction products of halo- and/or alkyl-contg. phenols and aldehydes) 5-60, unsatd. carboxylic acid-modified epoxidized resins 20-75, .gtoreq.1 **epoxy** compd. (other than the epoxidized resins) 0.01-45.0, catalysts 0.01-10.0, and photopolymn. initiators 0.001-15%. Thus, a mixt. of **epoxy** resin (EOCN-102) 15, BREN 15, reaction products of EOCN 102S and mono(.**beta.**-acryloyloxyethyl) phthalate 35, poly(Me methacrylate) 5, triglycidyl **isocyanurate** 10, trimethylolpropane triacrylate 10, Aronix 10, benzoin dimethylketal 3, N-nitrosophenylhydroxylamine Al salts 0.03, Epi-cure 147 9, benzimidazole 0.25, and Diaresin Green C 0.25 part was coated on a substrate and dried 30 min at 80.degree. to give a 70-.mu. layer having good developed figures after exposed to 1 J/cm2 UV radiation and developed 3 min with chloroethene.

IT 114481-98-0 114481-99-1 114482-00-7
114482-01-8 114482-02-9 114482-03-0
114482-04-1 114482-05-2 114592-89-1
114592-90-4 114592-91-5

RL: TEM (Technical or engineered material use); USES (Uses)
(light-sensitive resists, for printed circuit boards)

RN 114481-98-0 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with EOCN 102, EOCN 102S, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate and (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 80111-79-1

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 71343-77-6

CMF Unspecified

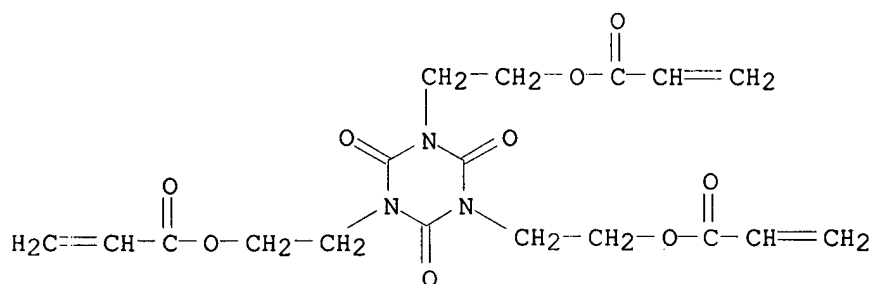
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 40220-08-4

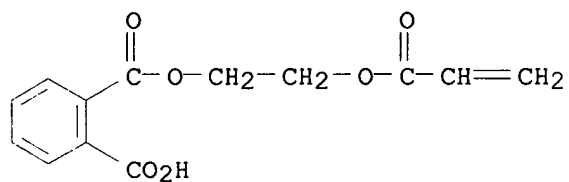
CMF C18 H21 N3 O9



CM 4

CRN 30697-40-6

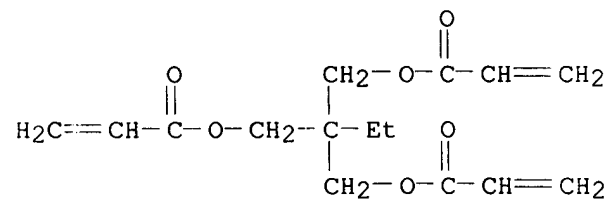
CMF C13 H12 O6



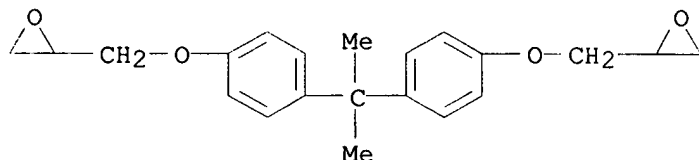
CM 5

CRN 15625-89-5

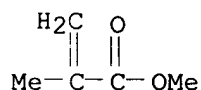
CMF C15 H20 O6



CM 6

CRN 1675-54-3
CMF C21 H24 O4

CM 7

CRN 80-62-6
CMF C5 H8 O2

RN 114481-99-1 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (chloromethyl)oxirane, EOCN 102S, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate and (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 80111-79-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

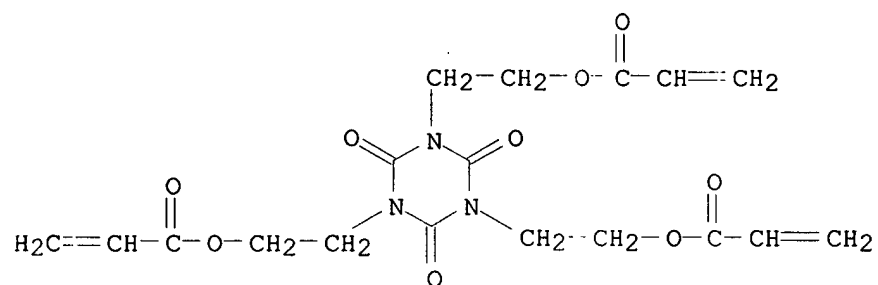
CM 2

CRN 71343-77-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

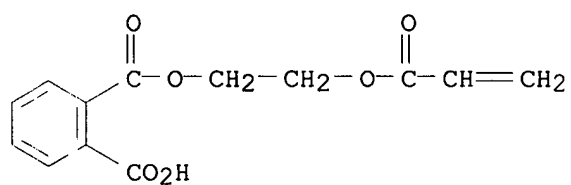
CRN 40220-08-4
CMF C18 H21 N3 O9



CM 4

CRN 30697-40-6

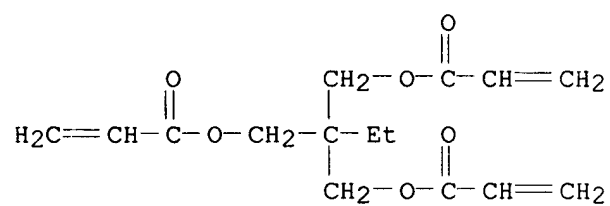
CMF C13 H12 O6



CM 5

CRN 15625-89-5

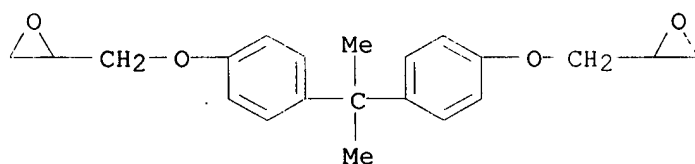
CMF C15 H20 O6



CM 6

CRN 1675-54-3

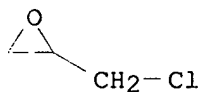
CMF C21 H24 O4



CM 7

CRN 106-89-8

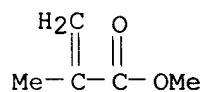
CMF C3 H5 Cl O



CM 8

CRN 80-62-6

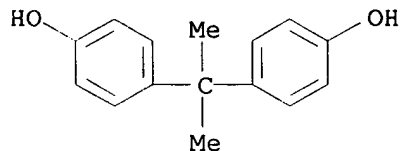
CMF C5 H8 O2



CM 9

CRN 80-05-7

CMF C15 H16 O2



RN 114482-00-7 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with EOCN 102, EOCN 102S, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 80111-79-1

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

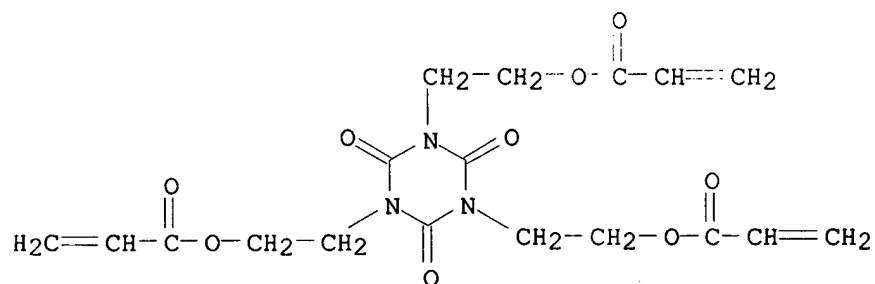
CRN 71343-77-6

CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

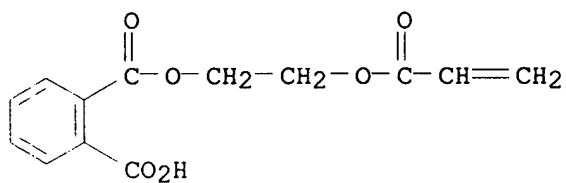
CM 3

CRN 40220-08-4
CMF C18 H21 N3 O9



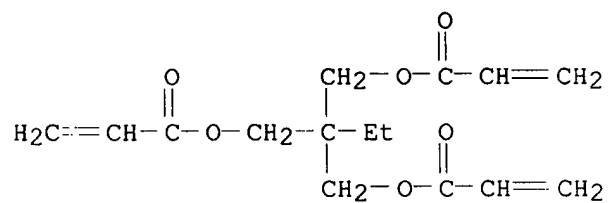
CM 4

CRN 30697-40-6
CMF C13 H12 O6



CM 5

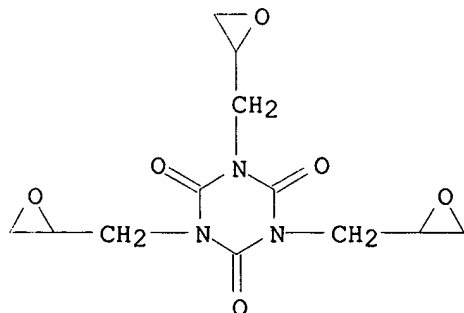
CRN 15625-89-5
CMF C15 H20 O6



CM 6

CRN 2451-62-9

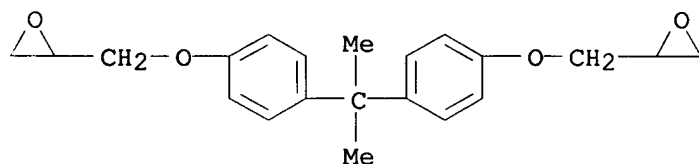
CMF C12 H15 N3 O6



CM 7

CRN 1675-54-3

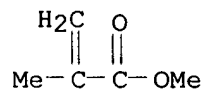
CMF C21 H24 O4



CM 8

CRN 80-62-6

CMF C5 H8 O2



RN 114482-01-8 HCAPLUS

CN 2-Propenoic acid, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triy)tri-2,1-ethanediyl ester, polymer with EOCN 102, 2-ethyl-2-[[[1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl di-2-propenoate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 71343-77-6

CMF Unspecified

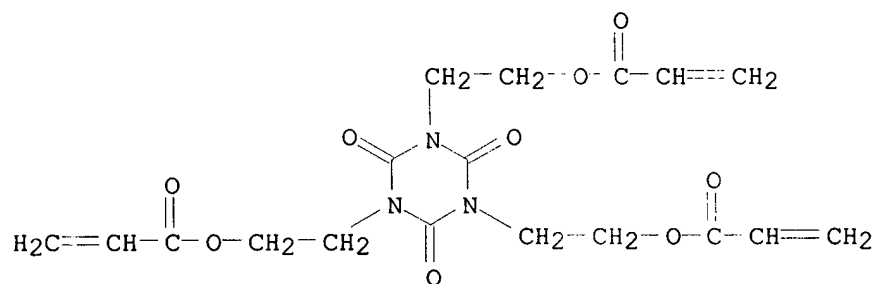
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 40220-08-4

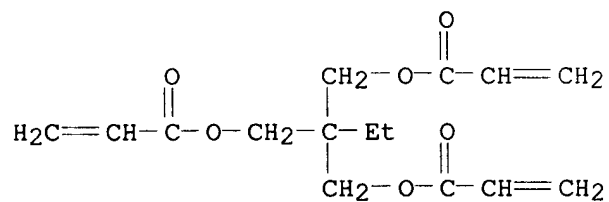
CMF C18 H21 N3 O9



CM 3

CRN 15625-89-5

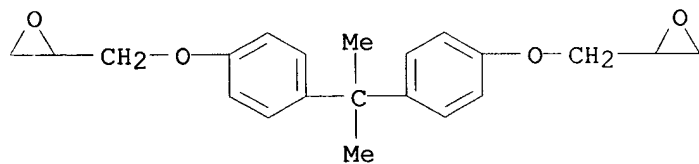
CMF C15 H20 O6



CM 4

CRN 1675-54-3

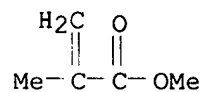
CMF C21 H24 O4



CM 5

CRN 80-62-6

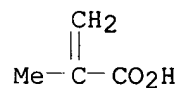
CMF C5 H8 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 114482-02-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, EOCN 102,

2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl
 di-2-propenoate,
 4,4'-(1-methylethylidene)bis[phenol], 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate and
 (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triy1)tri-2,1-ethanediyl
 tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 71343-77-6

CMF Unspecified

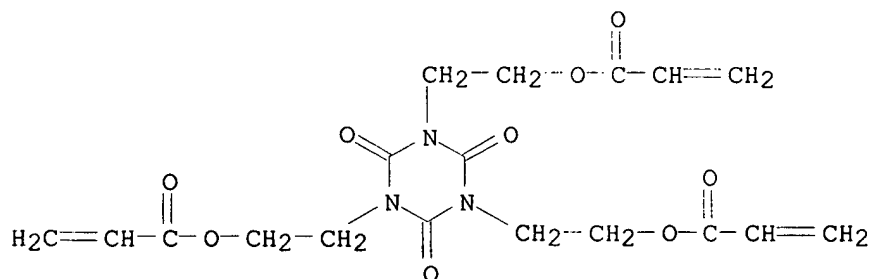
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 40220-08-4

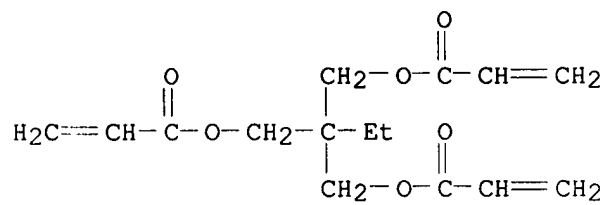
CMF C18 H21 N3 O9



CM 3

CRN 15625-89-5

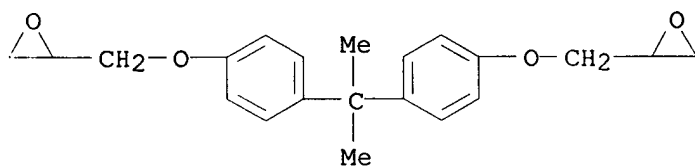
CMF C15 H20 O6



CM 4

CRN 1675-54-3

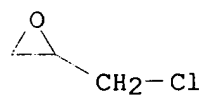
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CM 5

CRN 106-89-8

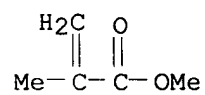
CMF C3 H5 C1 O



CM 6

CRN 80-62-6

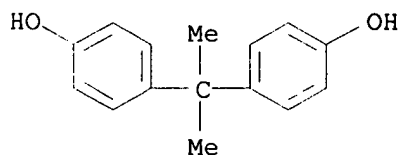
CMF C5 H8 O2



CM 7

CRN 80-05-7

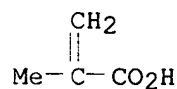
CMF C15 H16 O2



CM 8

CRN 79-41-4

CMF C4 H6 O2



RN 114482-03-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with EOCN 102, 2-ethyl-2-[[{(1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl di-2-propenoate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 71343-77-6

CMF Unspecified

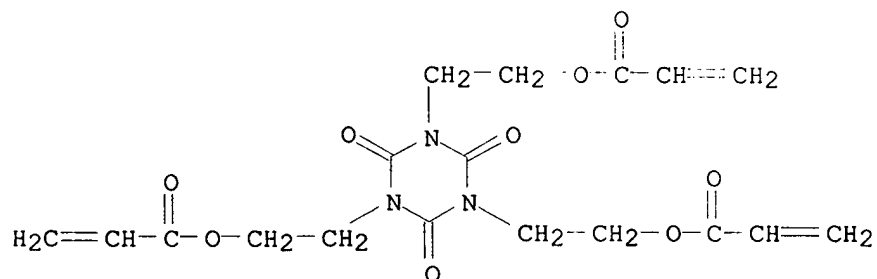
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 40220-08-4

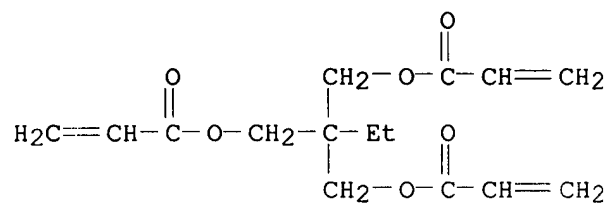
CMF C18 H21 N3 O9



CM 3

CRN 15625-89-5

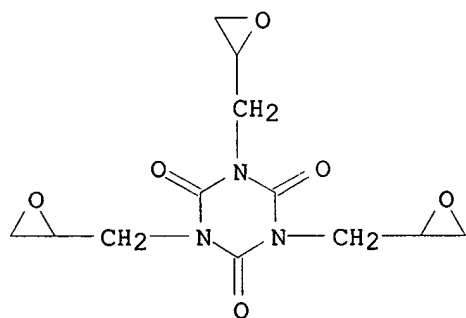
CMF C15 H20 O6



CM 4

CRN 2451-62-9

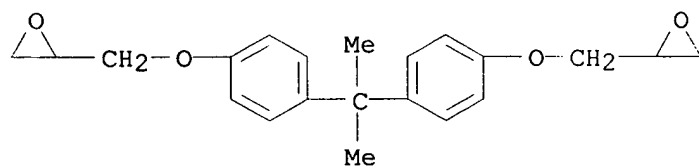
CMF C12 H15 N3 O6



CM 5

CRN 1675-54-3

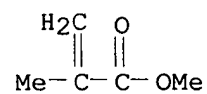
CMF C21 H24 O4



CM 6

CRN 80-62-6

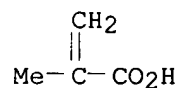
CMF C5 H8 O2



CM 7

CRN 79-41-4

CMF C4 H6 O2



RN 114482-04-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with BREN, (chloromethyl)oxirane, EOCN 102, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate and (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate (9CI) (CA

INDEX

NAME)

CM 1

CRN 71343-77-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 68859-34-7

CMF Unspecified

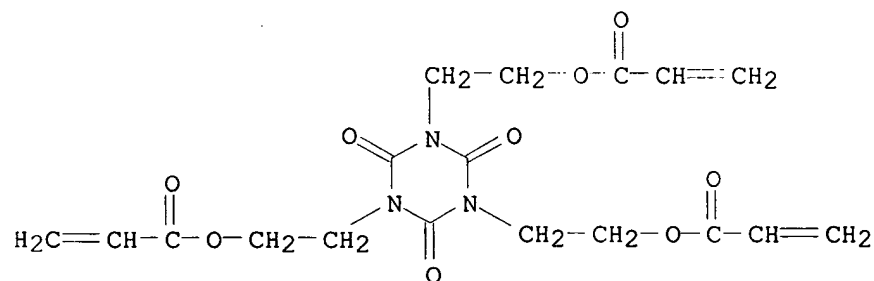
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 40220-08-4

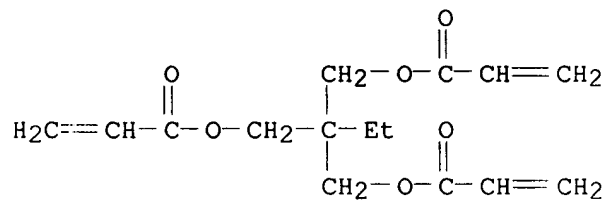
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CM 4

CRN 15625-89-5

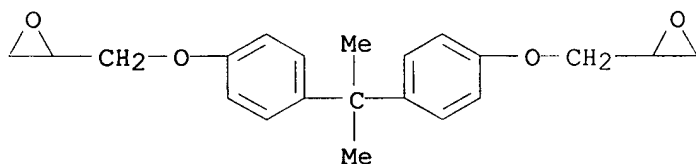
CMF C15 H20 O6



CM 5

CRN 1675-54-3

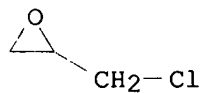
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CM 6

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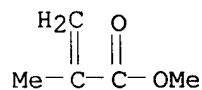
CMF C3 H5 Cl O



CM 7

CRN 80-62-6

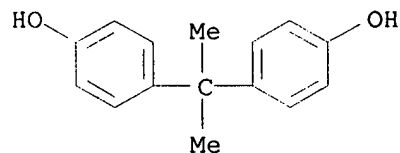
CMF C5 H8 O2



CM 8

CRN 80-05-7

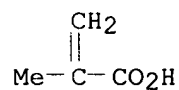
CMF C15 H16 O2



CM 9

CRN 79-41-4

CMF C4 H6 O2



RN 114482-05-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with BREN, EOCN 102,
2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl

di-2-propenoate,

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane],
methyl 2-methyl-2-propenoate,

(2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-

triyl)tri-2,1-ethanediyl tri-2-propenoate and 1,3,5-tris(oxiranylmethyl)-
1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 71343-77-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 68859-34-7

CMF Unspecified

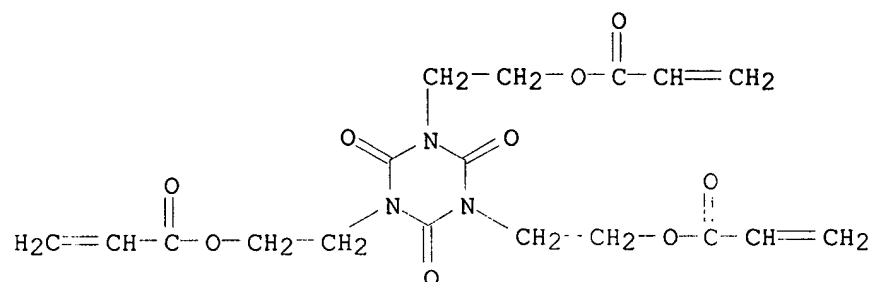
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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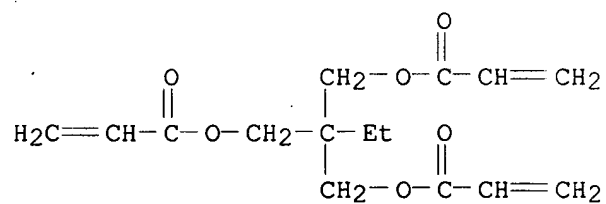
CMF C18 H21 N3 O9



CM 4

CRN 15625-89-5

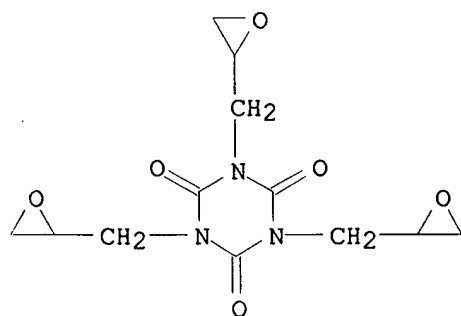
CMF C15 H20 O6



CM 5

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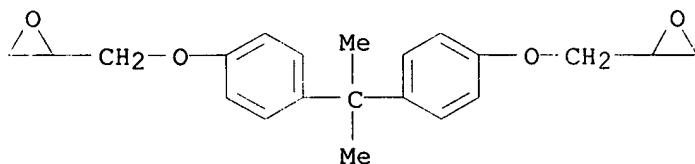
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CM 6

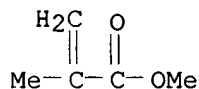
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CMF C21 H24 O4



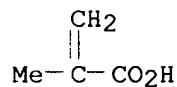
CM 7

CRN 80-62-6
CMF C5 H8 O2



CM 8

CRN 79-41-4
CMF C4 H6 O2



RN 114592-89-1 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with BREN, EOCN 102, EOCN 102S, Epicure 147, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 114512-72-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 80111-79-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 71343-77-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

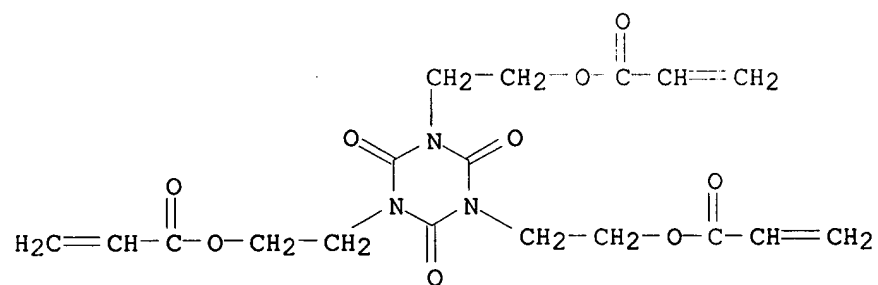
CM 4

CRN 68859-34-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

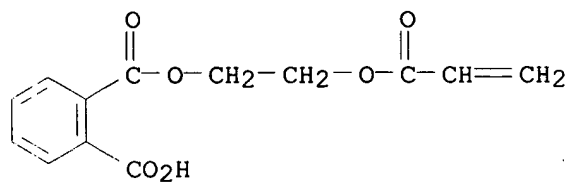
CM 5

CRN 40220-08-4
CMF C18 H21 N3 O9



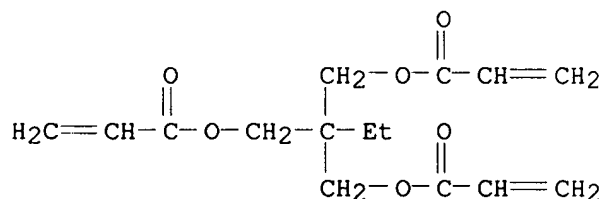
CM 6

CRN 30697-40-6
CMF C13 H12 O6



CM 7

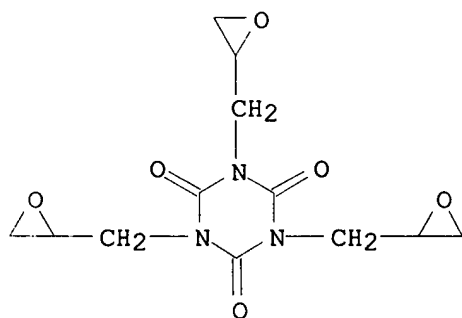
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CMF C15 H20 O6



CM 8

CRN 2451-62-9

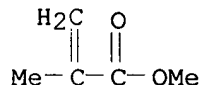
CMF C12 H15 N3 O6



CM 9

CRN 80-62-6

CMF C5 H8 O2



RN 114592-90-4 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with BREN, EOCN 102, EOCN 102S, Epicure 147,

2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], methyl 2-methyl-2-propenoate, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 114512-72-0

| | |
|-----|-------------|
| CMF | Unspecified |
|-----|-------------|

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 80111-79-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 71343-77-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

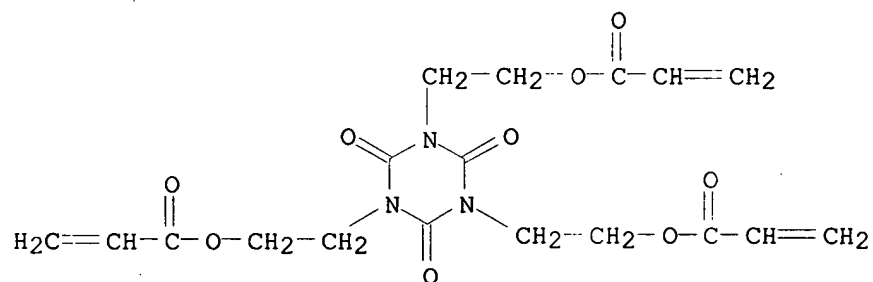
CM 4

CRN 68859-34-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

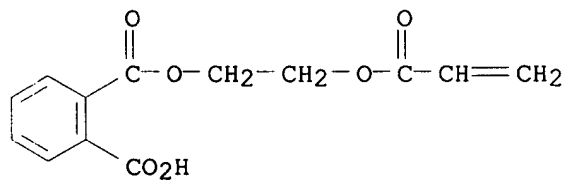
CM 5

CRN 40220-08-4
CMF C18 H21 N3 O9



CM 6

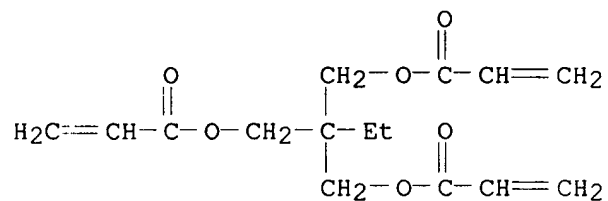
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CM 7

CRN 15625-89-5

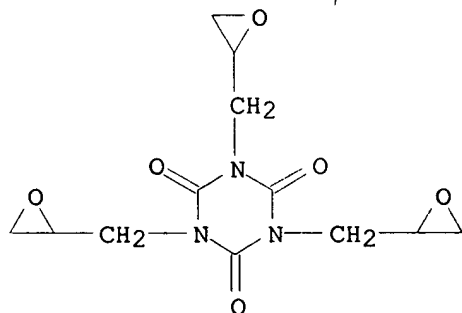
CMF C15 H20 O6



CM 8

CRN 2451-62-9

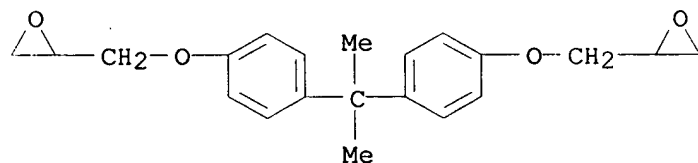
CMF C12 H15 N3 O6



CM 9

CRN 1675-54-3

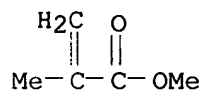
CMF C21 H24 O4



CM 10

CRN 80-62-6

CMF C5 H8 O2



RN 114592-91-5 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with BREN, (chloromethyl)oxirane, EOCN 102, EOCN 102S, Epicure 147, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 114512-72-0

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 80111-79-1

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 71343-77-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 68859-34-7

CMF Unspecified

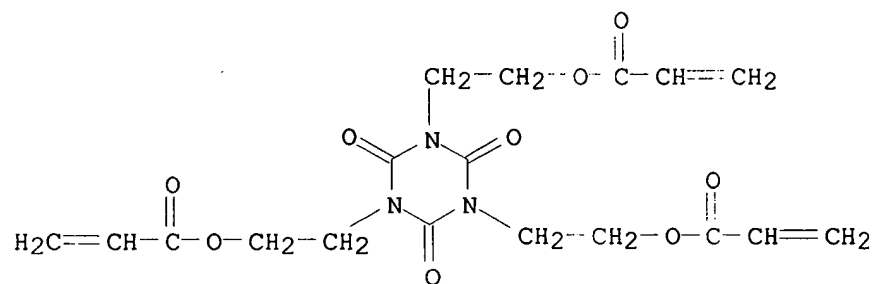
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

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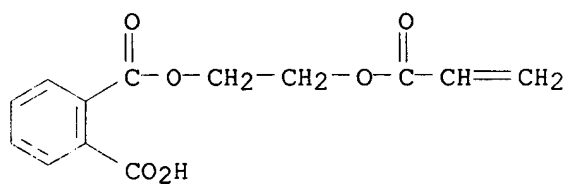
CMF C18 H21 N3 O9



CM 6

CRN 30697-40-6

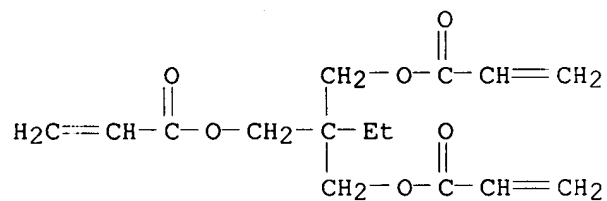
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CM 7

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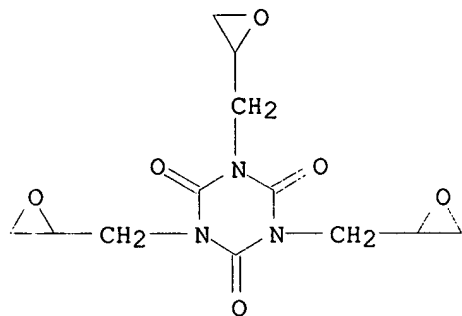
CMF C15 H20 O6



CM 8

CRN 2451-62-9

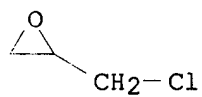
CMF C12 H15 N3 O6



CM 9

CRN 106-89-8

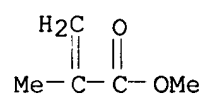
CMF C3 H5 Cl O



CM 10

CRN 80-62-6

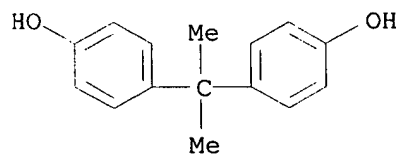
CMF C5 H8 O2



CM 11

CRN 80-05-7

CMF C15 H16 O2



=> D HIS

(FILE 'HCAPLUS' ENTERED AT 09:45:16 ON 15 JUN 1999)
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 09:52:42 ON 15 JUN 1999

L1 1 S 2451-62-9
L2 742 S 46.492.1/RID AND 3 1.30.1/RID
L3 663 S L2 AND C12H15N3O6
L4 1 S 106-89-8
L5 516 S 108-80-5 OR 108-80-5/CRN
L6 17717 S 106-89-8/CRN
L7 17718 S L4 OR L6
L8 230 S 46.492.1/RID AND 3/CL
L9 34 S L8 AND 12/C
L10 23 S L9 AND 3/O
L11 8 S C12H18CL3N3O6
L12 5 S L11 AND L8
L13 3 S L3 AND BETA
L14 27 S L3 AND ALPHA

FILE 'CAPLUS' ENTERED AT 10:01:25 ON 15 JUN 1999

L15 1150 S L3
L16 50 S L15 AND (BETA)
L17 51 S L15 AND (ALPHA)
L18 23 S L16 AND L17
L19 2 S L3 AND L5 AND L7 AND L12

FILE 'CAOLD' ENTERED AT 10:07:42 ON 15 JUN 1999

L20 7 S L3
L21 0 S L20 AND ALPHA AND BETA
L22 0 S L3 AND L5 AND L12

FILE 'CASREACT' ENTERED AT 10:09:02 ON 15 JUN 1999

L23 2 S L3/PRO
L24 2 S L23 AND L5/RRT
L25 0 S L24 AND L12/RRT

FILE 'USPATFULL' ENTERED AT 10:09:27 ON 15 JUN 1999

L26 214 S L3
L27 64 S L26 AND ALPHA AND BETA
L28 27 S L27 AND CRYSTAL?
L29 0 S L26 AND ALPHA(8A)CRYSTAL? AND BETA(8A)CRYSTAL?
L30 0 S L26 AND ALPHA(20A)CRYSTAL? AND BETA(20A)CRYSTAL?
L31 20 S L26 AND ALPHA(9A)BETA AND CRYSTAL?
L32 0 S L3/P AND L12
L33 0 S L13

FILE 'CAPLUS' ENTERED AT 10:21:40 ON 15 JUN 1999

L34 14 S L13
L35 13 S L13 AND L14
L36 6 S L35 NOT L18

FILE 'CAOLD' ENTERED AT 10:23:02 ON 15 JUN 1999

L37 0 S L13 AND L14

=> D L18 BIB ABS HITSTR

L18 ANSWER 1 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1997:294992 CAPLUS

DN 126:344192

TI Curing of carboxyl-functional polyester and triglycidyl isocyanurate (TGIC)

AU Vargha, Viktoria

CS Budapesti Muszaki Egyetem Muanyag, Gumiipari Tanszek, Hung.

SO Muanyag Gumi (1997), 34(4), 141-149

CODEN: MUGUAO; ISSN: 0027-2914

PB Gepipari Tudomanyos Egyesulet

DT Journal

LA Hungarian

AB The thermal behavior of both diastereomer racemates of triglycidyl isocyanurate (.beta.-TGIC i.e. RRR/SSS of m.p. 156.degree. and .alpha.-TGIC i.e. RRS/SSR of m.p. 103.degree.) was characterized via simultaneous thermal anal. and DSC. Both .beta.- and .alpha.-TGIC were stable up to 190.degree. in flowing air. The exothermic heat of thermal oxidative decompn. started to evolve at 248.degree. for each isomer. For the mixt. of isomers the starting temp. of thermal oxidative decompn. was <248.degree.. In the mixt. of isomers the presence of the .beta.-component was detectable by DSC anal. The curing behavior of reactive systems with Uralac P 2400 for powder coating application has been investigated by functional group anal., rotational viscometry, and after gelation by measuring the glass transition temp. (Tg). The dependence of Tg and of the enthalpy of curing on the conversion of precondensation has been measured. The enthalpy of glass transition of the precondensates, the enthalpy of curing as well as the temp., where side reactions predominate, have been detd. via isothermal DSC. For the time-temp.-transformation diagram of the reactive system the iso-curing time, iso-curing temp., iso-viscosity (gelation), and iso-mass loss curves have been measured and the iso-Tg curves have been drawn.

IT 190014-86-9P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(triglycidyl isocyanurate curing of carboxy-functional polyester

powder

coatings)

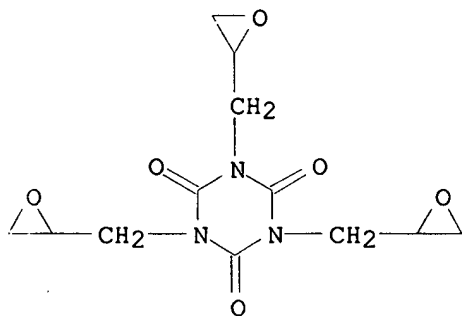
RN 190014-86-9 CAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 2,2-dimethyl-1,3-propanediol and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 2451-62-9

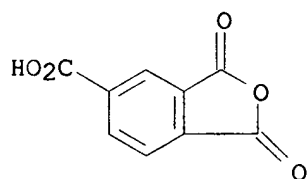
CMF C12 H15 N3 O6



CM 2

CRN 552-30-7

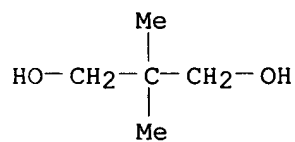
CMF C9 H4 O5



CM 3

CRN 126-30-7

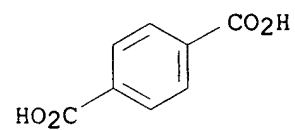
CMF C5 H12 O2



CM 4

CRN 100-21-0

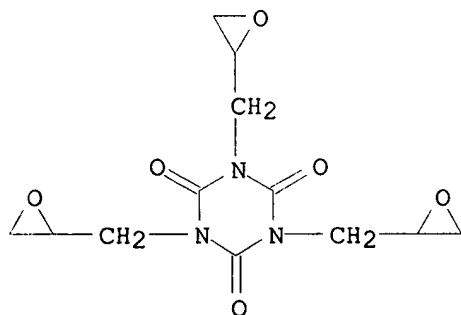
CMF C8 H6 O4



IT 2451-62-9, Triglycidyl isocyanurate

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)

(triglycidyl isocyanurate thermal and crosslinking properties)
RN 2451-62-9 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 2

L18 ANSWER 2 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1995:996370 CAPLUS

DN 124:179005

TI Nonaqueous dispersions of carboxylic acid-functional polymeric microparticles for flow control in polyepoxide-polyacid-based coatings

IN Das, Suryya K.; Kilic, Soner; Simpson, Dennis A.; Pinchok, Michael A., Jr.; Christenson, James R.

PA PPG Industries, Inc., USA

SO PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DT Patent

LA English

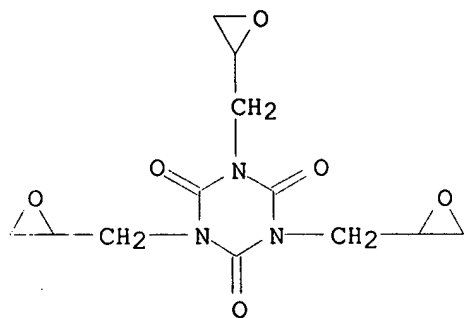
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9527012 | A1 | 19951012 | WO 95-US4054 | 19950330 |
| | W: AU, BR, CA, CZ, JP, KP, MX, PL, RU | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5494954 | A | 19960227 | US 94-343067 | 19941121 |
| | AU 9522362 | A1 | 19951023 | AU 95-22362 | 19950330 |
| PRAI | US 94-223257 | | 19940404 | | |
| | US 94-223258 | | 19940404 | | |
| | US 94-343067 | | 19941121 | | |
| | WO 95-US4054 | | 19950330 | | |
| AB | Polyepoxide-polyacid-based coating compns. contain dispersions of carboxylic acid-functional polymeric microparticles for controlling sag and pigment flake orientation. The carboxylic acid-functional polymeric microparticles are optionally crosslinked. A typical compn. contained amyl propionate 20, dipropylene glycol 6.10, Tinuvin 328 2.68, Tinuvin | | | | |
| 123 | 0.35, poly(Bu acrylate) 0.83, Et acrylate-2-ethylhexyl acrylate copolymer 0.06, 24.5% solids poly(acrylic acid)-EtOAc dispersion [Bu methacrylate (I)-glycidyl methacrylate (II)-Me methacrylate (III) copolymer dispersant] | | | | |
| | 15.62, 64.7% 600.2:1200:12:39.8:81.7 I-II-III-.alpha | | | | |
| | .-methylstyrene dimer-styrene copolymer soln. 52.32, 74% | | | | |
| | 4417.9:2532.9:144.9:144.9 I-II-III-styrene copolymer soln. 24.68, 68% | | | | |
| | pentaerythritol tetrakis(acid methylhexahydrophthalate) soln. 46.68, 70% | | | | |
| | 100.9:230.7 maleic anhydride-1-octene copolymer Et ester soln. 14.65, and isostearic acid 2.8 parts. | | | | |
| IT | 124592-34-3P | | | | |
| | RL: IMF (Industrial manufacture); PREP (Preparation) | | | | |
| | (nonaq. dispersions of functional polymeric microparticles) | | | | |
| RN | 124592-34-3 CAPLUS | | | | |
| CN | 2-Propenoic acid, polymer with 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME) | | | | |

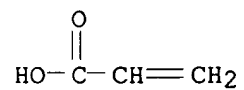
CM 1

CRN 2451-62-9

CMF C12 H15 N3 O6



CM 2

CRN 79-10-7
CMF C3 H4 O2

=> D L18 BIB ABS HITSTR 3

L18 ANSWER 3 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1995:703671 CAPLUS

DN 123:285919

TI Triglycidyl isocyanurate isomers

AU Vargha, Viktoria; Gacs-Baitz, Eszter

CS Dep. Plastics Rubber Technol., Tech. Univ. Budapest, Budapest, H-1521, Hung.

SO Angew. Makromol. Chem. (1995), 228, 25-40

CODEN: ANMCBO; ISSN: 0003-3146

DT Journal

LA English

AB Triglycidyl isocyanurate (TGIC) was sepd. from the resinous reaction product of cyanuric acid and epichlorohydrin by crystn. from methanol. The crystn. fractions were sep. characterized by means of functional group

anal., IR-spectroscopy, high-resoln. ¹H-NMR and ¹³C-NMR spectroscopy, simultaneous thermal anal. and DSC. The structure of the two diastereomer

racemates of TGIC (**.beta.**-TGIC and **.alpha.**-TGIC) was studied by using high-resoln. NMR spectroscopy and the ¹H-NMR spectra were

calcd. for both. It was found that the high-melting fraction (m.p. 156.degree.) which pptd. from the methanol-soln. relates to the **.beta.**-diastereomeric racemate of TGIC. All other methanol-sol. or slightly sol. fractions crystd. from the methanol soln. (melting range 100-103.degree.) represent the **.alpha.**-diastereomer racemate of TGIC, with the **.beta.**-diastereomer racemate always being present. Recrystn. from methanol always resulted in the presence of both diastereomers. This may indicate the presence of mixed crystals.

IT 59653-73-5P 59653-74-6P

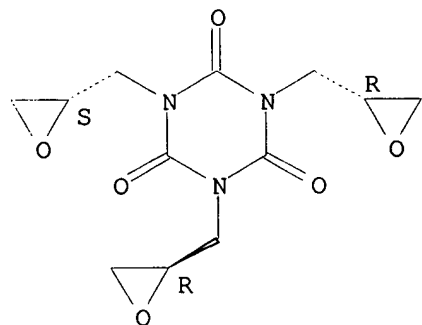
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and characterization of triglycidyl isocyanurate isomers)

RN 59653-73-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Currently available stereo shown.

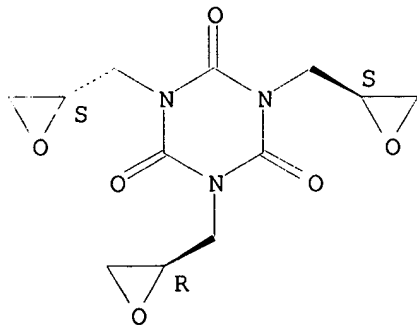


RN 59653-74-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-,

stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> D L18 BIB ABS HITSTR 4

L18 ANSWER 4 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1993:613998 CAPLUS

DN 119:213998

TI Photosensitive thermosetting resin composition as solder resist and patterning using same

IN Kamoshita, Hideaki; Oba, Yoichi; Iwasa, Sandai; Yuasa, Hitoshi; Sato, Haruyoshi; Otsuki, Yutaka

PA Nippon Oil Co., Ltd., Japan; Asahi Chemical Research Laboratory Co., Ltd.

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 04356051 | A2 | 19921209 | JP 91-35617 | 19910204 |
| | JP 2835539 | B2 | 19981214 | | |

AB The title compn. contains as essential components (a) a photosensitive oligomer obtained by reacting an alc. OH group-bearing **.alpha.,.beta.-unsatd. monocarboxylic acid ester** HCR1:CR2CO2R3OH (R1, R2 = H, C1-6 org. residual group; R3 = C2-12 alkylene) with an acid anhydride group-contg. conjugated diene polymer and/or copolymer prepd. by the addn.

reaction of a conjugated diene polymer and/or copolymer having a no.-av. mol. wt. 500-5000 with an **.alpha.,.beta.-unsatd.**

dicarboxylic acid anhydride to ring opening .gtoreq.80 mol% of the anhydride groups of the adduct, (b) a photopolymn. initiator(s), (c) an epoxy resin having >2 epoxy groups in the mol., and (d) 2,4-diamino-6-vinyl-s-triazine and/or

2,4-diamino-6-methacryloyloxyethyl-s-

triazine. The title patterning comprises the steps of patternwise exposure of the photosensitive thermosetting compn. coated on a printed circuit board, development, and thermosetting to form a solder resist pattern. The compn. shows long shelf life and superior adhesiveness, elec. insulation, and heat resistance and produces resist patterns with high resoln.

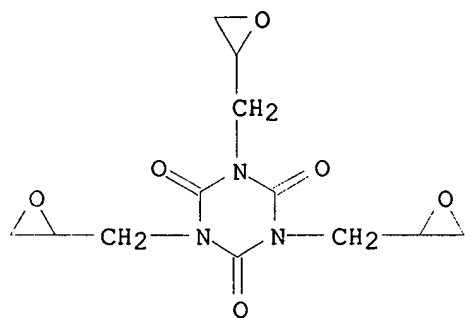
IT 2451-62-9, Triglycidyl isocyanurate

RL: USES (Uses)

(photosensitive thermosetting solder resist contg.)

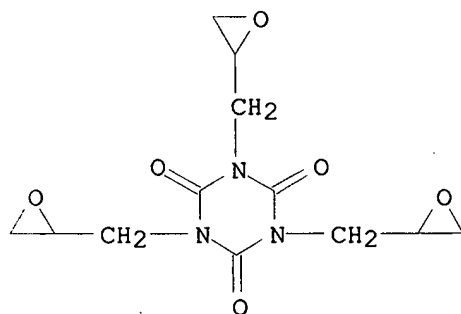
RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 5

L18 ANSWER 5 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1992:464582 CAPLUS
DN 117:64582
TI Salmonella mutagenicity tests: V. Results from the testing of 311 chemicals
AU Zeiger, Errol; Anderson, Beth; Haworth, Steve; Lawlor, Timothy; Mortelmans, Kristien
CS Exp. Carcinog. Mutagen. Branch, Natl. Inst. Environ. Health Sci., Research Triangle Park, NC, USA
SO Environ. Mol. Mutagen. (1992), 19(Suppl. 21), 2-141
CODEN: EMMUEG; ISSN: 0893-6692
DT Journal
LA English
AB Three hundred eleven chems. were tested under code, for mutagenicity, in S. typhimurium; 35 of the chems. were tested more than once in the same or different labs. The tests were conducted using a preincubation protocol in the absence of exogenous metabolic activation, and in the presence of liver S-9 from Aroclor-induced male Sprague-Dawley rats and Syrian hamsters. Some of the volatile chems. were also tested in desiccators.
A total of 120 chems. were mutagenic or weakly mutagenic, 3 were judged questionable, and 172 were nonmutagenic. The remaining 16 chems. produced different responses in the two or three labs. in which they were tested. The results and data from these tests are presented.
IT 2451-62-9
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (mutagenicity of, testing of)
RN 2451-62-9 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI) (CA INDEX NAME)



=> D L18 BIB ABS HITSTR 6

L18 ANSWER 6 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1991:400778 CAPLUS

DN 115:778

TI Covalently-linked complexes and methods for enhanced cytotoxicity and imaging

IN Anderson, David C.; Morgan, A. Charles; Abrams, Paul G.; Nichols, Everett J.; Fritzberg, Alan R.

PA NeoRx Corp., USA

SO Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 359347 | A2 | 19900321 | EP 89-250014 | 19890814 |
| | EP 359347 | A3 | 19900418 | | |
| | EP 359347 | B1 | 19921223 | | |
| | R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| | US 5135736 | A | 19920804 | US 88-232337 | 19880815 |
| | US 5169933 | A | 19921208 | US 89-390241 | 19890807 |
| | CA 1334513 | A1 | 19950221 | CA 89-608198 | 19890811 |
| | JP 02124833 | A2 | 19900514 | JP 89-209992 | 19890814 |
| | AT 83669 | E | 19930115 | AT 89-250014 | 19890814 |
| PRAI | US 88-232337 | | 19880815 | | |
| | EP 89-250014 | | 19890814 | | |

AB Covalently-linked complexes (CLCs) for targeting a defined population of cells comprise a targeting protein (e.g. antibody, hormone, enzyme, etc.),

a cytotoxic agent (e.g. radionuclide, toxin, drug, etc.) an enhancing moiety capable of enhancing CLC-target cell interaction (e.g. a translocating/internalizing moiety, an anchoring peptide, membrane-sol. hydrophobic mol., etc.). The CLCs are used to enhance in vivo cytotoxicity and imaging (no data). Translocating peptide,

Cys-Gly-Glu-Ala-Ala-Leu-Ala(Glu-Ala-Leu-Ala)₄-Glu-Ala-Leu-Glu-Ala-Leu-Ala-Ala-NH₂, is conjugated via succinimidyl

4(N-maleimidemethyl)cyclohexane-1-carboxylate (SMCC) to reduced toxin A chain. The conjugate is reacted with iminothiolane to generate further thiol groups which are then bonded to reduced antibody to prep. translocating peptide-ricin A chain-antibody CLC.

IT 59653-73-5D, Teroxirone, conjugates with targeting protein and target cell interaction enhancer

RL: BIOL (Biological study)

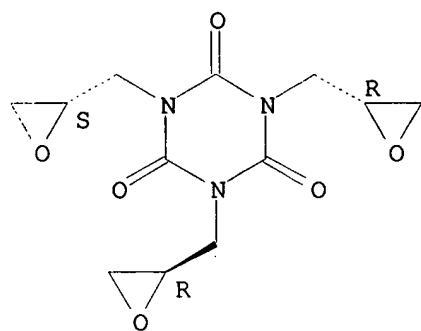
(cell targeting with, for enhanced cytotoxicity and imaging)

RN 59653-73-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

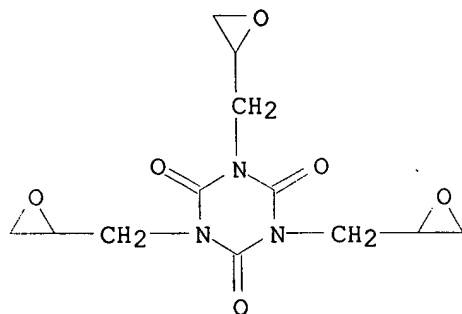
Relative stereochemistry.

Currently available stereo shown.



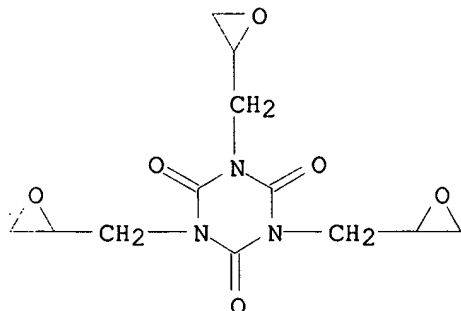
=> D L18 BIB ABS HITSTR 7

L18 ANSWER 7 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1990:235879 CAPLUS
DN 112:235879
TI Thermal behavior and chemical reactivities with curing agents of stereoisomeric 1,3,5-triglycidyl-s-triazinetriene
AU Nakagi, Junji; Kamagata, Kazuo
CS Res. Dev. Dep., Shikoku Chem. Corp., Tokushima, 771-02, Japan
SO Kobunshi Ronbunshu (1990), 47(3), 169-75
CODEN: KBRBA3; ISSN: 0386-2186
DT Journal
LA Japanese
AB Triglycidyl isocyanate, synthesized from isocyanuric acid and epichlorohydrin, was a mixt. of crystals, **.alpha.** and **.beta.** forms, having m.ps. at .apprx.100 and .apprx.150.degree., resp.; their crystals were stereoisomers. The thermal behavior and chem. reactivities of the isomers were studied using differential thermal anal. Endothermic peaks due to fusion appear at .apprx.100 and .apprx.150.degree.C in their DTA curves; but subsequent heating gave no endothermic peak. An **.alpha.** form crystal kept at room temp. for 1 day gave a endothermic peak at .apprx.100.degree.. A **.beta.** form crystal kept at room temp. for 10 days gave no endothermic peak. The mol. conformation and crystal packing arrangements of the **.alpha.** and **.beta.** forms were very different. Activation energies of polymn. calcd. according to the Kissinger method were 132 kJ mol⁻¹ for the **.alpha.** form and 2-methylimidazole (I) and 163 kJ mol⁻¹ for the **.beta.** form and I. The activation energies for **.alpha.** and **.beta.** forms cured with methylhexahydrophthalic anhydride were 130 and 136 kJ mol⁻¹, resp.
IT 2451-62-9, Triglycidyl isocyanurate
RL: USES (Uses)
(crystal forms and kinetics of polymn. of)
RN 2451-62-9 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



CM 2

CRN 2451-62-9
CMF C12 H15 N3 O6



CM 3

CRN 106716-71-6
CMF C3 H4 O2 . x Unspecified
CDES 8:GD,ESTER

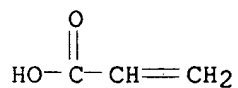
CM 4

CRN 70903-88-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 79-10-7
CMF C3 H4 O2



IT 97397-21-2, TEPIC
RL: USES (Uses)
(photosensitive compns. contg., for photoresists and solder resists)
RN 97397-21-2 CAPLUS

=> D L18 BIB ABS HITSTR 9

L18 ANSWER 9 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1989:114804 CAPLUS

DN 110:114804

TI Crystallographic resolution and crystal and molecular structures of stereoisomers of 1,3,5-triglycidyl-s-triazinetriene

AU Hempel, Andrew; Camerman, Norman; Camerman, Arthur

CS Biochem. Dep., Univ. Toronto, Toronto, ON, Can.

SO J. Med. Chem. (1989), 32(3), 648-51

CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

AB The crystal and mol. structures of .alpha. and .beta. isomers of the antineoplastic alkylating agent 1,3,5-triglycidyl-s-triazinetriene were detd. by X-ray diffraction. Although the isomers differ chem. only in the order of a C and an O atom in one of the glycidyl epoxide rings, the mol. conformations and crystal packing arrangements are

very different. The different phys. and biol. properties of the two stereoisomers can be explained on the basis of the structures.

IT 59653-73-5 59653-74-6

RL: PRP (Properties)

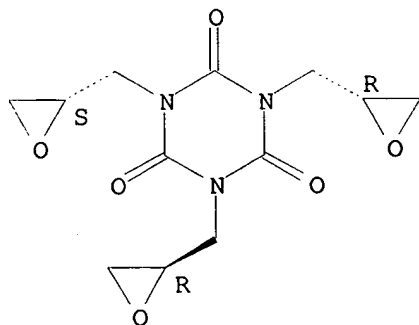
(crystal and mol. structure of)

RN 59653-73-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

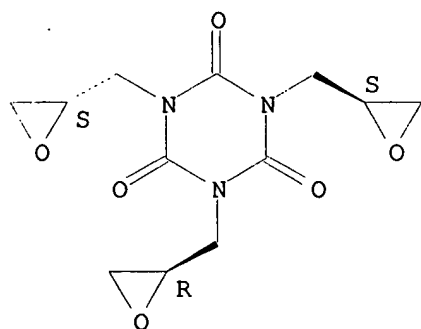
Currently available stereo shown.



RN 59653-74-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> D L18 BIB ABS HITSTR 10

L18 ANSWER 10 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1987:600925 CAPLUS
DN 107:200925
TI Method for solidifying triglycidyl isocyanurate
IN Yasuo, Takakuwa; Hisao, Ideda
PA Nissan Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-----------------------------------|------|----------|-----------------|----------|
| PI | EP 232869 | A2 | 19870819 | EP 87-101663 | 19870206 |
| | EP 232869 | A3 | 19890412 | | |
| | EP 232869 | B1 | 19930512 | | |
| | R: AT, CH, DE, FR, GB, IT, LI, NL | | | | |
| | JP 62187463 | A2 | 19870815 | JP 86-29575 | 19860213 |
| | JP 05067145 | B4 | 19930924 | | |
| | AU 8768581 | A1 | 19870820 | AU 87-68581 | 19870206 |
| | AU 582294 | B2 | 19890316 | | |
| | AT 89280 | E | 19930515 | AT 87-101663 | 19870206 |

PRAI JP 86-29575 19860213
EP 87-101663 19870206

AB A method for producing pulverizable solid triglycidyl isocyanurate (I),
formed by the reaction of isocyanuric acid with epichlorohydrin, useful
as

a curing agent for polyester-type powder paints and in the field of
sealing compds. for electronic materials, comprises dispersing I powder
as

seed to molten I at 70-115.degree., and cooling the dispersion. Thus, a
stirred reaction flask was charged with 320 g viscous molten I, then 50 g
I powder [12 mesh pass, m.p. 92-115.degree. (.alpha.-type 69, .
beta.-type 22, others 9%)] was added as seed. The mixt. was
uniformly dispersed at 82-84.degree. under stirring for 10 min, the
dispersion transferred to a flat vat and left to cool at room temp. In 2
min, the temp. of the dispersion dropped to 60.degree. and solidified in

8

min to a pulverizable solid. The Durometer hardness (A-model) was 80-90.

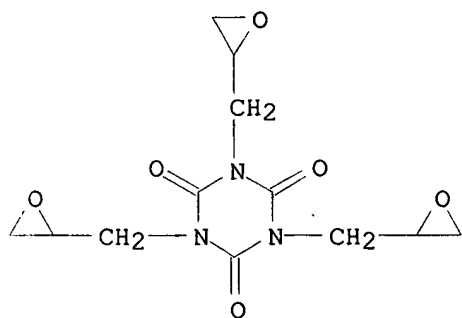
IT 2451-62-9, Triglycidyl isocyanurate

RL: PROC (Process)

(solidification of, in manuf. of pulverizable product)

RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 11

L18 ANSWER 11 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1986:554121 CAPLUS

DN 105:154121

TI Hardenable epoxy compositions with increased storage stability

IN Lunak, Stanislav; Dobas, Ivan; Zvonar, Vladimir; Stary, Stanislav;
Kitzler, Jaroslav; Hanzlik, Vladimir; Rajdl, Josef

PA Czech.

SO Czech., 6 pp.

CODEN: CZXXA9

DT Patent

LA Czech

FAN.CNT 1

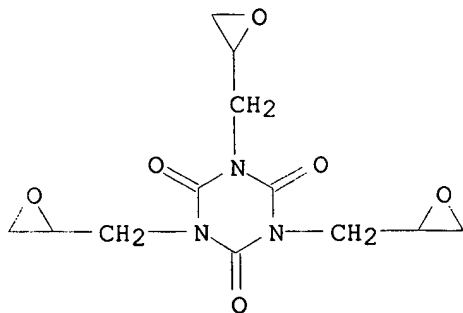
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | CS 224495 | B | 19840116 | CS 81-5904 | 19810805 |

AB The title compns. consist of additives, plasticizers, pigments, and fillers in a binder comprising 100 parts adducts of epoxy resins contg. 0.01-30% acrylic and/or methacrylic, maleic, fumaric, cinnamic, crotonic, oleic, linoleic, linolenic, eleostearic, ricinoleic, dimerized fatty acids or their mixts., 5-50 parts esters and/or polyesters of maleic and/or fumaric acids (mol. wt. 120-3000), optionally .ltoreq.100 parts epoxy resin (0.01-1.1 epoxy equiv/100 g) and optionally .ltoreq.20 parts alkyl-, cycloalkyl-, aryl-, aralkyl-, and/or polyalkyl esters (C4-300) or .alpha.,.beta.-unsatd. monocarboxylic acids. Thus, 100 parts epoxy resin acrylate [prepd. by reaction of low-mol.-wt. bisphenol A-epichlorohydrin epoxy resin (epoxy equiv. 0.52/100 g) with acrylic acid epoxy group/CO2OH] molar ratio 1.6 dissolved in 20 parts di-Bu maleate (viscosity 5.3 Pa-s) and homogenized with 21.5 parts cyclohexylpropylenamine gave, after hardening 24 h at room temp., a clear, elastic and tough compn. used as a binder for laminates and as flooring materials.

IT 2451-62-9
RL: USES (Uses)
(epoxy resin ester composites contg., storage-stable)

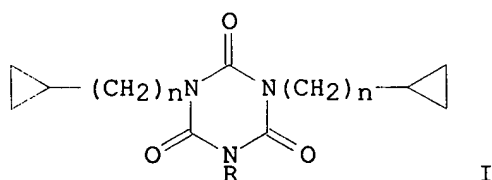
RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 12

L18 ANSWER 12 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1984:483559 CAPLUS
DN 101:83559
TI Investigation of the antitumor of new epoxide derivatives. Part I:
s-Triazinetrione derivatives
AU Fischer, H.; Zeidler, U.; Budnowski, M.; Atassi, G.; Dumont, P.;
Venditti,
J.; Yoder, O. C.
CS Henkel K.-G.a.A., Duesseldorf, D-4000/1, Fed. Rep. Ger.
SO Arzneim.-Forsch. (1984), 34(5), 543-7
CODEN: ARZNAD; ISSN: 0004-4172
DT Journal
LA English
GI

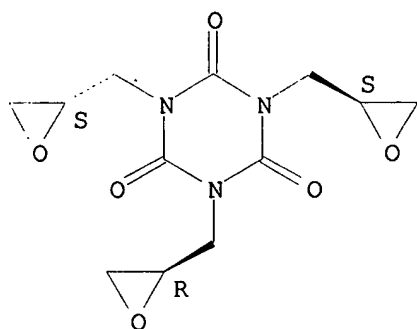


AB Derivs. of triazinetriones I (R = Me, CH₂, CH:CH₂, (un)substituted oxirane, etc.; n = 1-4) were prepd. and tested for neoplasm inhibitory activity against leukemia P388 in CDF1 mice. Of the compds. tested, NSC 324639 (I; R = CH₂CH(OH)CH₂OH) [78627-41-5] prepd. by hydrolysis of NSC 296964 (I; R = glycidyl, .beta.-isomer) [59653-74-6] had similar antineoplastic activity to that obsd. with NSC 296934 (I; R = glycidyl, .alpha.-isomer) [59653-73-5]. The water soly. of NSC 324639 was 20-fold greater than that for NSC 296934, and this was a great improvement since the major side effects of NSC 296934 (previous observation) appear to be attributed to its relatively poor water soly. Structure-activity relations for the epoxy function of I are discussed.

IT 59653-74-6
RL: BIOL (Biological study)
(hydrolysis and neoplasm inhibitory activity of, structure in relation to)

RN 59653-74-6 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 59653-73-5

RL: BAC (Biological activity or effector, except adverse); BIOL
(Biological study)

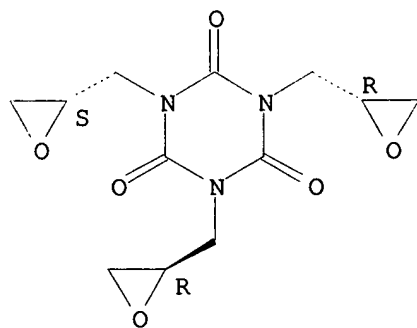
(neoplasm inhibitory activity of, structure in relation to)

RN 59653-73-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-
[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Currently available stereo shown.



=> D L18 BIB ABS HITSTR 13

L18 ANSWER 13 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1983:199414 CAPLUS

DN 98:199414

TI Low-temperature-curing pressure-sensitive adhesives

PA Nitto Electric Industrial Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

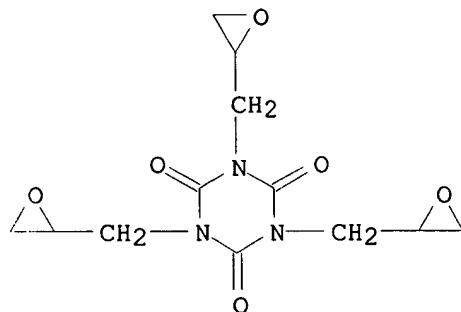
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 57190060 | A2 | 19821122 | JP 81-75333 | 19810518 |

AB Low-temp.-curing pressure-sensitive adhesives comprise a copolymer of (1) an unsatd. monomer with a phosphoric acid group 0.1-10, (2) a C4-12-alkyl (meth)acrylate (.ltoreq.50% is replaceable by other unsatd. monomers) 80-99.9, and (3) an .alpha.,.beta.-unsatd. carboxylic acid 0-10 wt.% and (4) 0.01-10 phr of a polyepoxide. Thus, a mixt. of 2-ethylhexyl acrylate 80, styrene 15, acrylic acid 4, 2-(methacryloyloxy)ethyl di-H phosphate 1, .alpha.,.alpha.'-azobisisobutyronitrile 0.2, and EtOAc 100 parts was heated to 60.degree. with stirring (the polymn. started after 10 min), kept 8 h at 70.degree., and treated with 110 parts EtOAc to give a 30%-solids soln. [viscosity (25.degree.) 70 P] of an acrylic copolymer [85797-31-5] (av. mol. wt. 2.1 .times. 105). The soln. was mixed with 2 phr Epikote 828 [25068-38-6], coated on a 4-mm-thick polyethylene [9002-88-4] foam, and heated 3 min at 60.degree. to give an adhesive tape with a 60-.mu. adhesive layer. Roll-pressed at 20 kg on a polished stainless steel plate, the tape showed adhesive strength (180.degree. angle peeling at 300 mm/min at 20.degree.) 860 g/20 mm.

IT 2451-62-9
RL: USES (Uses)
(acid phosphate group-contg. acrylic copolymers contg., for low-temp.-curing pressure-sensitive adhesive tapes)

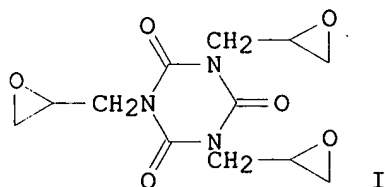
RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 14

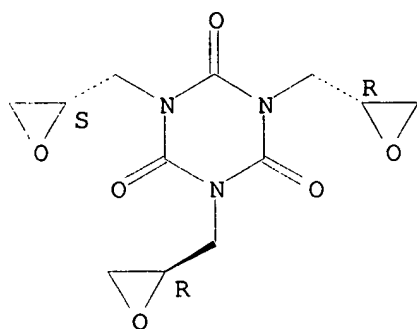
L18 ANSWER 14 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1981:132174 CAPLUS
DN 94:132174
TI Antitumoral effect in mice of a new triepoxide derivative: 1, 3, 5-triglycidyl-S-triazinetriene (NSG 296934]
AU Atassi, G.; Spreafico, F.; Dumont, P.; Nayer, P.; Klastersky, J.
CS Serv. Med., Inst. Jules Bordet, Brussels, 1000, Belg.
SO Eur. J. Cancer (1980), 16(12), 1561-7
CODEN: EJCAAH; ISSN: 0014-2964
DT Journal
LA English
GI



AB The antitumor properties of **.alpha.**-1,3,5-triglycidyl-S-triazinetriene (TGT)(I) [59653-74-6] and its **.beta.**-isomer [59653-73-5] were investigated on various transplantable mouse tumor systems. Although the 2 stereoisomers displayed a high therapeutic activity against P388 and L1210 leukemias when administered i.p., **.alpha.**-TGT was superior to the **.beta.** form in prolonging the lifespan of treated animals and in inducing long-term survival. **.alpha.**-TGT also demonstrated antitumor effect against advanced L1210 leukemia (increase in lifespan of 119% at 50 mg/kg .times. 9) and was still very active when administered orally against i.v. or ascitic L1210 leukemia. The i.p. treatment with **.alpha.**-TGT significantly inhibited the primary tumor growth and lung metastases of Lewis lung carcinoma. Finally, the high in vivo activity of **.alpha.**-TGT on normal P388 cells and on a subline of this leukemia markedly resistant to cyclophosphamide further warrant studies with this agent.

IT 59653-73-5 59653-74-6
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (neoplasm inhibition by)
RN 59653-73-5 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

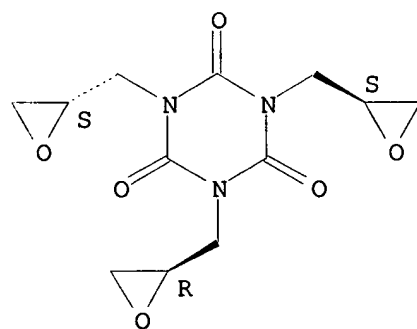
Relative stereochemistry.
Currently available stereo shown.



RN 59653-74-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> D L18 BIB ABS HITSTR 15

L18 ANSWER 15 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1981:74683 CAPLUS

DN 94:74683

TI Electrophotographic plates

PA Canon K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

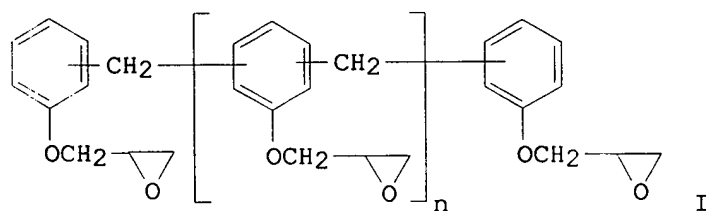
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 55089843 | A2 | 19800707 | JP 78-165841 | 19781228 |
| GI | | | | | |



AB Part or all of the elec. insulating overcoatings on electrophotog. plates is prepd. by hardening the reaction products of an epoxy compd. having .gtoreq.3 epoxy groups/mol. with an .alpha., .beta .-unsatd. carboxylic acid. Thus, I (n .simeq. 1) 50, acrylic acid 10, and

trimethylolpropane triacrylate 10 g were polymd. to give a copolymer (10,000-20,000 mol.wt.). The copolymer 100, benzophenone 0.1 part, and iso-Pr alc. were mixed to give a coating compn. (30% solids). An Al drum coated with CdS-cyclized butadiene rubber mixt. was dip-coated with the coating compn., and subsequently the epoxy-acrylate polymer layer was hardened by UV irradiation. The drum was then coated with a conventional photohardening type polyurethane to give a high-quality electrophotog. plate.

IT 76485-05-7

RL: USES (Uses)
(coatings, on electrophotog. plates)

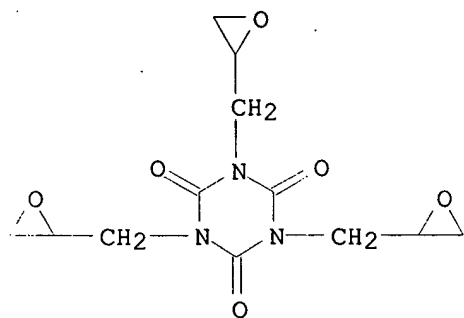
RN 76485-05-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenoic acid and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI)
(CA INDEX NAME)

CM 1

CRN 2451-62-9

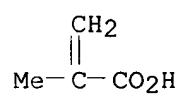
CMF C12 H15 N3 O6



CM 2

CRN 79-41-4

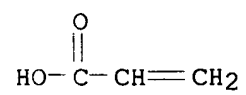
CMF C4 H6 O2



CM 3

CRN 79-10-7

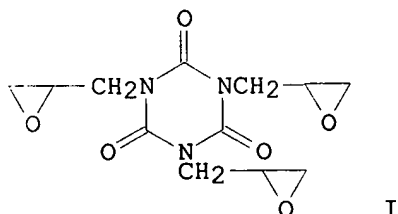
CMF C3 H4 O2



=> D L18 BIB ABS HITSTR 16

L18 ANSWER 16 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1981:41517 CAPLUS
DN 94:41517
TI Cytostatic drug or pharmaceutical composition
IN Budnowski, Manfred; Schnegelberger, Harald
PA Henkel K.-G.a.A., Fed. Rep. Ger.
SO Ger. Offen., 12 pp. Division of Ger. Offen. 2,907,349
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | DE 2953309 | A1 | 19801106 | DE 79-2953309 | 19790224 |
| GI | DE 2953309 | C2 | 19820930 | | |

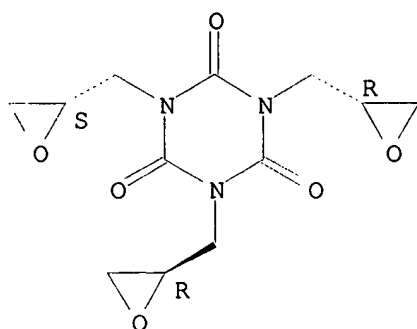


AB The diastereomers **.alpha.-** [59653-73-5] and **.beta.-** triglycidylisocyanurate [59653-74-6] (**.alpha.-** and **.beta.-I**, resp.) are water-sol. cytostatic agents for treatment of malignant neoplasms. For example, mice inoculated with 106 leukemia P388 cells had a mean survival time of 10.5 days. Treatment of inoculated mice with 100 mg **.alpha.-I**/kg/day i.p. for 9 days increased the mean survival time to 285% of that of untreated mice and produced 50% cures (>40 days survival). Corresponding figures for **.beta.-I** were 228% and 17%, resp.

IT 59653-73-5 59653-74-6
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (neoplasm inhibition by)

RN 59653-73-5 CAPLUS
CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

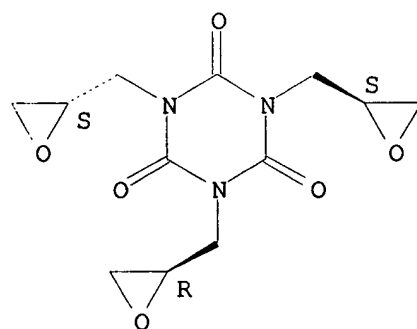
Relative stereochemistry.
Currently available stereo shown.



RN 59653-74-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> D L18 BIB ABS HITSTR 17

L18 ANSWER 17 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1981:25222 CAPLUS

DN 94:25222

TI Pharmaceutical preparations with cytostatic action

PA Henkel K.-G.a.A., Fed. Rep. Ger.

SO Ger. Offen., 13 pp.

CODEN: GWXXBX

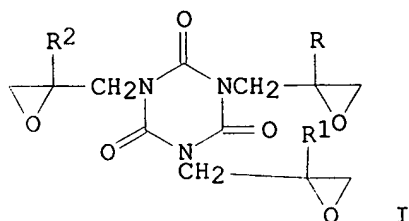
DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------------------------------|------|----------|-----------------|----------|
| PI | DE 2907349 | A1 | 19800828 | DE 79-2907349 | 19790224 |
| | DE 2907349 | C2 | 19820916 | | |
| | EP 14981 | A2 | 19800903 | EP 80-100806 | 19800218 |
| | EP 14981 | A3 | 19810211 | | |
| | EP 14981 | B1 | 19820224 | | |
| | R: AT, BE, CH, FR, GB, IT, LU, NL, SE | | | | |
| | AT 716 | E | 19820315 | AT 80-100806 | 19800218 |
| | BE 881834 | A1 | 19800821 | BE 80-199482 | 19800221 |
| | SE 8001425 | A | 19800825 | SE 80-1425 | 19800222 |
| | NL 8001100 | A | 19800826 | NL 80-1100 | 19800222 |
| | AU 8055830 | A1 | 19800904 | AU 80-55830 | 19800222 |
| | AU 536270 | B2 | 19840503 | | |
| | FR 2449451 | A1 | 19800919 | FR 80-3962 | 19800222 |
| | FR 2449451 | B1 | 19821210 | | |
| | GB 2044614 | A | 19801022 | GB 80-6109 | 19800222 |
| | GB 2044614 | B2 | 19830126 | | |
| | ZA 8001017 | A | 19810225 | ZA 80-1017 | 19800222 |
| | IL 59453 | A1 | 19840229 | IL 80-59453 | 19800222 |
| | CH 645893 | A | 19841031 | CH 80-1439 | 19800222 |
| | JP 55118484 | A2 | 19800911 | JP 80-22145 | 19800223 |
| | JP 63054688 | B4 | 19881028 | | |
| | CA 1123740 | A1 | 19820518 | CA 80-346385 | 19800225 |
| PRAI | DE 79-2907349 | | 19790224 | | |
| | EP 80-100806 | | 19800218 | | |

GI



AB I, where R, R₁, and R₂ are the same or different C₁-4 alkyl residues or H,
are used as cytostatics. .alpha.-Triglycidyl isocyanurate [

59653-73-5] and .beta.-triglycidyl isocyanurate [59653-74-6] were effective for the treatment of mice with leukemia P388, leukemia L1210, melanoma B, Lewis lung carcinoma, ependymoblastoma, or colon carcinoma 38 or 26.

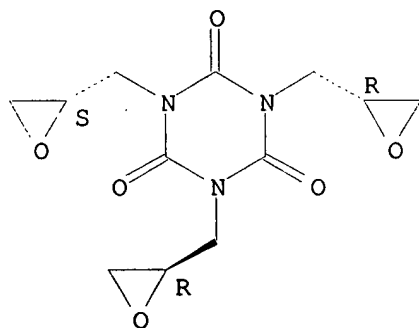
IT 59653-73-5 59653-74-6

RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(cytostatic activity of)

RN 59653-73-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

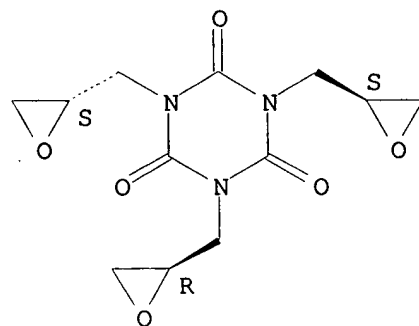
Relative stereochemistry.
Currently available stereo shown.



RN 59653-74-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> D L18 BIB ABS HITSTR 18

L18 ANSWER 18 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1976:433855 CAPLUS

DN 85:33855

TI Behavior of isomers of triglycidyl isocyanurate during processing to epoxy

resin moldings

AU Joel, Detlef; Becker, Hans

CS Zentralinst. Org. Chem., DAW, Berlin-Adlershof, E. Ger.

SO Plaste Kautsch. (1976), 23(5), 365-6

CODEN: PLKAAM

DT Journal

LA German

AB Viscosity and temp. profile in the prepn. of moldings by crosslinking the .alpha.- and .beta.-isomers of triglycidyl isocyanurate [2451-62-9], and the tech. product, with anhydrides, and the heat distortion temp., mech. loss, and elec. and mech.

properties of the products are discussed.

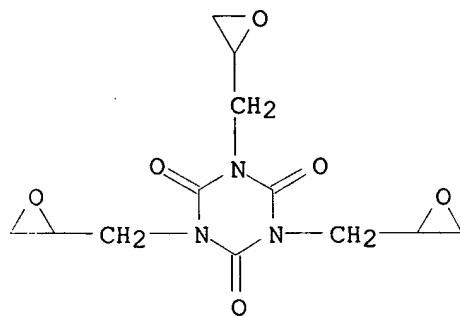
IT 2451-62-9

RL: USES (Uses)

(epoxy resins contg., isomerism effect on properties of)

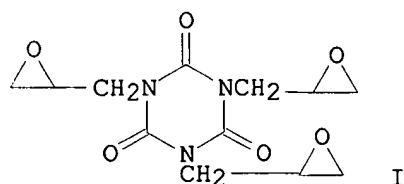
RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 19

L18 ANSWER 19 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1976:421303 CAPLUS
DN 85:21303
TI Isomers of triglycidyl isocyanurate. I
AU Joel, Detlef; Becker, Hans
CS Zentralinst. Org. Chem., DAW, Berlin, E. Ger.
SO Plaste Kautsch. (1976), 23(4), 237-9
CODEN: PLKAAM
DT Journal
LA German
GI



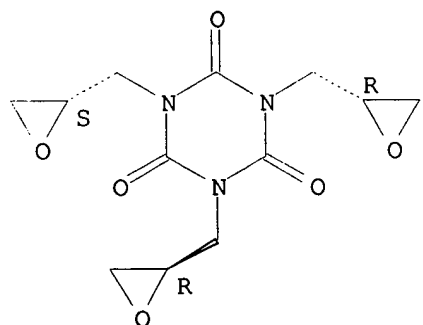
AB Cyanuric acid reacted with excess epichlorohydrin to give, via tris(3-chloro-2-hydroxypropyl) isocyanurate, isocyanurate I as the diastereoisomeric racemates. Repeated extn. of I with hot MeOH gave . **alpha.-I.** Four-fold recrystn. of the residue from CHCl₃ gave . **beta.-I.** The phys. properties, e.g., refractive index, crystal form, d., and thermal properties, of both isomers were detd.

IT 59653-73-5P 59653-74-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and phys. properties of)

RN 59653-73-5 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-bis[(2R)-oxiranylmethyl]-5-[(2S)-oxiranylmethyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Currently available stereo shown.

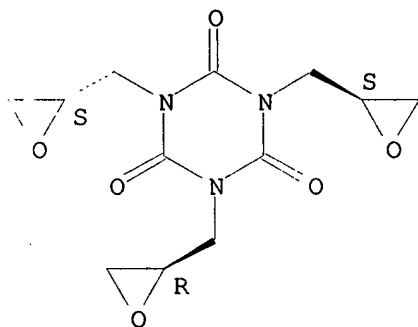


RN 59653-74-6 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-,

stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



=> D L18 BIB ABS HITSTR 20

L18 ANSWER 20 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1976:19289 CAPLUS

DN 84:19289

TI Thermosetting resin powder coating compositions

IN Miki, Katsuo; Ogita, Kiyoshi; Kinoshita, Masakatsu; Uehara, Kazuhiro

PA Nippon Paint Co., Ltd., Japan

SO Japan. Kokai, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

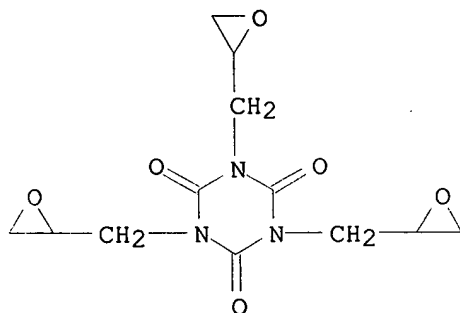
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 50113535 | A2 | 19750905 | JP 74-19388 | 19740220 |

AB Thermosetting resin powder coating compns. were prepd. from a mixt. of an .alpha., .beta.-unsatd. carboxylic acid-ethylenically unsatd. monomers copolymer, an epoxy resin contg. N-contg. cyclic groups, and a crosslinking agent. Thus, a mixt. of 10:15:40:85 acrylic acid-ethyl acrylate-ethylene-methyl methacrylate copolymer [57588-45-1] powder (mol. wt. 2200, secondary transition point 25.degree.) 60.0, TiO2 32.0, triglycidyl isocyanurate [2451-62-9] 7.0, dicyandiamide [461-58-5] 0.7, and Modaflow 0.3 part was melt mixed, and ground to give a powder coating compn. (90% 150-325 mesh), which was coated on a steel sheet, and baked 20 min at 200.degree. to give a 60-80-.mu.-thick coating film with erichsen value >7 mm and good impact and corrosion resistances.

IT 2451-62-9
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, contg. acrylic polymers, powd.)

RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 21

L18 ANSWER 21 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1974:537710 CAPLUS

DN 81:137710

TI Acrylic powder coatings

IN Kusano, Toshitsuku; Kumagai, Yugo; Shibuya, Ikutoshi; Abo, Masahiro

PA Hitachi Chemical Co., Ltd.

SO Japan. Kokai, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

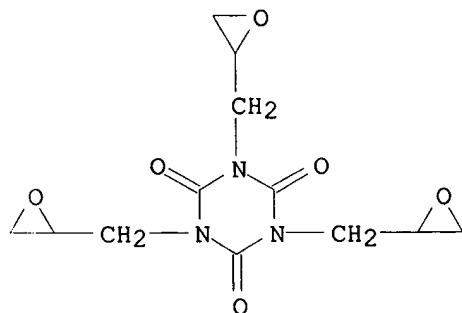
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 49031753 | A2 | 19740322 | JP 72-72509 | 19720721 |

AB Powder coating compns. were prepd. from an acrylic resin from 3-25% .
**alpha., .beta.-unsatd. carboxylic acid (or .alpha
., .beta.-unsatd. carboxylic anhydride or its half ester),**
CH₂:CRCO₂R₁ (R = H, Me, R₁ = C₁-18 alkyl), a termonomer, and 0.5-2.0
(epoxy) equiv. (based on acid equiv. of the acrylic resin) of triglycidyl
isocyanurate (I) [2451-62-9]. For example, a powder compn. from
10:35:15:40 acrylic acid-butyl acrylate-methyl methacrylate-styrene
polymer [27306-39-4] 64, I 6, TiO₂ 29.75, and Modaflow 0.25 part was
coated on steel to 70-80 .mu. thickness and baked at 180.deg. for 30 min
to give a coating with shorter gelation time, higher gloss, and better
adhesion impact resistance, solvent resistance and weather resistance
than
that using Epikote 1004 in place of I.

IT **2451-62-9**
RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agents, for (meth)acrylic acid copolymer powd. coating)

RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 22

L18 ANSWER 22 OF 23 CAPLUS COPYRIGHT 1999 ACS
AN 1972:127997 CAPLUS
DN 76:127997
TI 1,3,5-Triglycidyl isocyanurate
IN Habermeier, Juergen; Batzer, Hans; Porret, Daniel
PA Ciba-Geigy A.-G.
SO Ger. Offen., 15 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

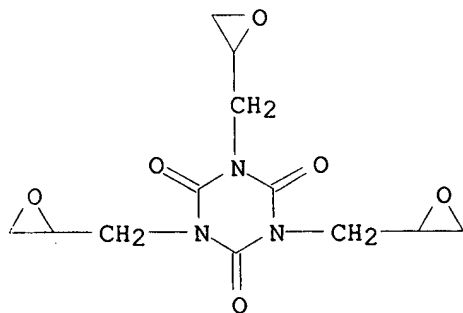
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------|------|----------|-----------------|----------|
| PI | DE 2132988 | A | 19720105 | DE 71-2132988 | 19710702 |
| | US 3793321 | A | 19740219 | US 71-158110 | 19710629 |
| | FR 2100108 | A5 | 19720317 | FR 71-24079 | 19710701 |
| | NL 7109201 | A | 19720104 | NL 71-9201 | 19710702 |
| | AT 306739 | B | 19730425 | AT 71-5755 | 19710702 |
| PRAI | CH 70-10043 | | 19700702 | | |

AB 1,3,5-Triglycidyl isocyanurate (I) [2451-62-9], used for manuf. of epoxy resins, was prepd. in the .alpha.- and .beta .-form in 10-12:1 ratio by epoxidn. of 1,3,5-triallyl isocyanurate (II) with H2O2 and nitriles RCN [from which the formation of RC(:NH)OOH was assumed]. Thus, to a mixt. of II, MeOH, PhCN, and a small amt. Na2HPO4 35% H2O2 was added in 3 portions, the pH was adjusted to 9.5 with 0.5N NaOH and the mixt. kept at 50.deg. for 5.5 hr to give 70% I with 89% of the theoretical epoxide content. I was stored for 40 days at 25.deg., then it was mixed with hexahydrophthalic anhydride (III). This compn. was usable .leq.1500 cP for 238 min at 120.deg., i.e. the usable time decreased by 22% as compared to the unstored I; the corresponding data for mixts. of com. I and III were 68 min and 69%.

IT 2451-62-9P
RL: PREP (Preparation)
(manuf. of, for epoxy resins)

RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)



=> D L18 BIB ABS HITSTR 23

L18 ANSWER 23 OF 23 CAPLUS COPYRIGHT 1999 ACS

AN 1970:22308 CAPLUS

DN 72:22308

TI Retarding agent for epoxide resins

IN Lieske, Edgar; Weinrich, Erwin

PA Henkel und Cie. G.m.b.H.

SO Ger., Offen., 10 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------|------|----------|-----------------|-------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | DE 1904934 | | 19691120 | | |
| PRAI | CH | | 19680429 | | |

AB Compds. contg. the group RSO_2X ($\text{X} = \text{OH}$, Cl , or an alkoxy group; $\text{R} =$ an aromatic, aliphatic, cycloaliphatic, or heterocyclic group) were used to extend the pot life of mixts. of a compd. contg. epoxide groups and an anhydride of a carboxylic acid. Thus, 100 g triglycidyl isocyanurate and 140 g hexahydrophthalic anhydride were sep. warmed to 120.degree. and mixed, 1 g amidosulfonic acid (I) was added, the temp. maintained at 120.degree., the time to reach a viscosity of 1500 cP was measured, and a time of 10 min was subtracted to give 1920 min pot life compared with 22 min when I was omitted. Other epoxides used were the diglycidyl hexahydrophthalate and a bisphenol A epoxy resin. Other retarders used were sulfanilic acid, p-toluenesulfonic acid, .beta.-naphthalenesulfonic acid, .alpha.-sulfopalmitic acid, .alpha.-sulfostearic acid, .alpha.-hydroxyoctanesulfonic acid, 1,3-benzenedisulfonic acid, p-hydrazinobenzenesulfonic acid, 8-quinolinesulfonic acid, 8-hydroxy-5-quinolinesulfonic acid dihydrate, 7-iodo-8-hydroxy-5-quinolinesulfonic acid, 1-amino-2-hydroxy-4-naphthalenesulfonic acid, 8-amino-1,6-naphthalenedisulfonic acid, 4-amino-3-nitro-benzenesulfonic acid, .alpha.-(N-ethylanilino)-m-toluenesulfonic acid, 2-amino-5-chloro-p-toluenesulfonic acid, N-ethyl-5-sulfoanthranilic acid, 3-bromo-10-camphorsulfonic acid monohydrate, .alpha.-naphthylamine-4-sulfonic acid, polystyrenesulfonic acid, 1-hexadecyl H sulfate, MeSO_2Cl , p-toluenesulfonyl chloride, Me_2SO_4 , and Et p-toluenesulfonate.

IT 2451-62-9

RL: USES (Uses)

(crosslinking of anhydride-contg., prevention by sulfonic acid derivs.)

RN 2451-62-9 CAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)- (9CI)
(CA INDEX NAME)

